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                 139427-42-2/BI OR 162758-33-0/BI OR 346684-19-3/BI OR
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                 OR 9000-96-8/BI OR 9025-82-5/BI OR 90880-94-7/BI)
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L19            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8
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L26           55 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11/DP
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L48            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L47
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                 OR 9000-96-8/BI OR 9025-82-5/BI OR 90880-94-7/BI)
L6             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  364057-10-3/RN
L8             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  346684-19-3/RN
L10            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  375371-28-1/RN
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L19           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8
L20           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10
L21           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L18 OR L19 OR L20)
L25         761 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11
L26          55 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11/DP
L38         761 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 OR L26
L40           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L2 AND PROPAN?
L41          40 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L40
L42           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND L41
L43          21 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND ?AZA?
L44           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21 OR L42
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L46         127 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MAREK, P?/AU
L47          41 SEA FILE=HCAPLUS ABB=ON  PLU=ON  TROCHA, A?/AU
L48           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L47
L49           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L46 OR L47) AND L38
L50           4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L48 OR L49
L52          21 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L45 NOT L50


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L61  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2001:721438  HCAPLUS  Full-text
DOCUMENT NUMBER:          135:288343
TITLE:                    Preparation and activity of nitrosated and
                          nitrosylated nonsteroidal antiinflammatory
                          compounds
INVENTOR(S):              Bandarage, Upul K.; Dong, Qing; Fang, Xinqin;
                          Garvey, David S.; Mercer, Gregory J.; Richardson,
                          Stewart K.; Schroeder, Joseph D.; Wang, Tiansheng
PATENT ASSIGNEE(S):       Nitromed, Inc., USA
SOURCE:                   U.S., 59 pp., Cont.-in-part of U.S. Ser. No.
                          182,433, abandoned.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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     US 6297260            B1    20011002    US 1999-429019          19991029
     CA 2348741            A1    20000511    CA 1999-2348741         19991029
     WO 2000025776         A1    20000511    WO 1999-US25481         19991029
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             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, GW, ML, MR, NE, SN, TD, TG
     EP 1126838            A1    20010829    EP 1999-958708          19991029
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             PT, IE, SI, LT, LV, FI, RO
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JP 2002528495	T	20020903	JP 2000-579217	19991029
AU 763000	B2	20030710	AU 2000-16012	19991029
US 2002016322	A1	20020207	US 2001-938560	20010827
US 6593347	B2	20030715		
US 2003207919	A1	20031106	US 2003-431457	20030508
AU 2004200091	A1	20040205	AU 2004-200091	20040109

PRIORITY APPLN. INFO.:

US 1998-182433	B2	19981030
AU 2000-16012	A	19991029
US 1999-429019	A3	19991029
WO 1999-US25481	W	19991029
US 2001-938560	A3	20010827

OTHER SOURCE(S): MARPAT 135:288343

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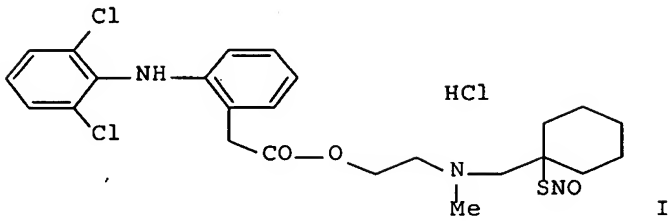


I

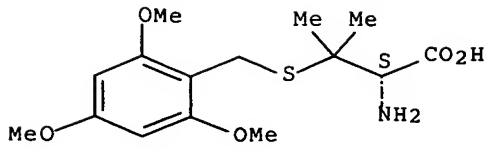
AB The present invention describes novel nitrosated and/or nitrosylated nonsteroidal antiinflammatory compds., and novel compns. comprising at least one nitrosated and/or nitrosylated nonsteroidal antiinflammatory compound, and, optionally, at least one compound that donates, transfers or releases nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, stimulates endogenous synthesis of nitric oxide or is a substrate for nitric oxide synthase. The present invention also provides methods for treating, preventing and/or reducing inflammation, pain, and fever; decreasing or reversing the gastrointestinal, renal and other toxicities resulting from the use of nonsteroidal antiinflammatory drugs; treating and/or preventing gastrointestinal disorders; treating inflammatory disease states and disorders; and treating and/or preventing ophthalmic diseases or disorders. Thus, I was prepared in 8 steps from cyclohexanecarboxaldehyde and shows a relative activity of 1, 1.2 and 0.02 in analgesic, antiinflammatory and gastric lesion tests.

IT **346684-19-3P 364057-10-3P**
(preparation and activity of nitrosated and nitrosylated nonsteroidal antiinflammatory compds.)

RN 346684-19-3 HCAPLUS

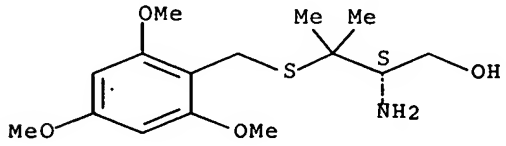
CN D-Valine, 3-[[(2,4,6-trimethoxyphenyl)methyl]thio]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 364057-10-3 HCAPLUS
CN 1-Butanol, 2-amino-3-methyl-3-[[(2,4,6-trimethoxyphenyl)methyl]thio]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K031-445
ICS C07D211-54
INCL 514327000
CC 21-2 (General Organic Chemistry)
Section cross-reference(s): 1
IT 108-30-5P, Succinic anhydride, preparation 1445-73-4P, N-Methyl-4-piperidone 3772-13-2P, 2,2-Dimethylthiirane 7684-18-6P 22204-53-1P, (S)-6-Methoxy-α-methyl-2-naphthaleneacetic acid 28399-82-8P 38275-47-7P 52958-74-4P 53599-14-7P 57561-39-4P 89031-84-5P 99658-58-9P 108914-03-0P 121492-06-6P 127382-65-4P 135716-09-5P 147804-30-6P 172657-58-8P 175694-41-4P 181761-60-4P 190515-96-9P 205043-35-2P 241491-56-5P 241491-59-8P 260267-99-0P 260268-00-6P 260268-16-4P 306776-34-1P 306776-35-2P 306776-38-5P 306776-39-6P 306776-45-4P 306776-57-8P 306776-58-9P 306776-66-9P 306776-69-2P 306776-70-5P 346683-89-4P 346683-90-7P 346683-91-8P **346684-19-3P** 364055-64-1P 364055-68-5P 364055-70-9P 364055-72-1P 364055-74-3P 364055-76-5P 364055-78-7P 364055-80-1P 364056-14-4P 364056-15-5P 364056-16-6P 364056-17-7P 364056-18-8P 364056-19-9P 364056-20-2P 364056-21-3P 364056-22-4P 364056-23-5P 364056-24-6P 364056-25-7P 364056-26-8P 364056-27-9P 364056-28-0P 364056-29-1P 364056-30-4P 364056-31-5P 364056-32-6P 364056-33-7P 364056-34-8P 364056-35-9P 364056-36-0P 364056-39-3P 364056-40-6P 364056-42-8P 364056-44-0P 364056-45-1P 364056-46-2P 364056-47-3P 364056-48-4P 364056-49-5P 364056-50-8P 364056-51-9P 364056-52-0P 364056-54-2P 364056-55-3P 364056-56-4P 364056-57-5P 364056-58-6P 364056-59-7P 364056-60-0P 364056-61-1P 364056-62-2P 364056-63-3P 364056-64-4P 364056-65-5P 364056-66-6P 364056-67-7P 364056-68-8P 364056-69-9P 364056-70-2P 364056-71-3P 364056-72-4P 364056-73-5P 364056-74-6P 364056-75-7P 364056-76-8P 364056-77-9P 364056-78-0P 364056-79-1P 364056-80-4P 364056-81-5P 364056-82-6P 364056-83-7P 364056-84-8P

364056-85-9P 364056-86-0P 364057-02-3P 364057-03-4P
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364590-42-1P 364590-43-2P 364590-44-3P 364590-45-4P
364590-97-6P 364590-98-7P 364603-72-5P
(preparation and activity of nitrosated and nitrosylated nonsteroidal antiinflammatory compds.)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:472491 HCAPLUS Full-text
DOCUMENT NUMBER: 135:76524
TITLE: Preparation of nitrosated and nitrosylated cyclooxygenase-2 inhibitors
INVENTOR(S): Bandarage, Ramani R.; Bandarage, Upul K.; Fang, Xinqin; Garvey, David S.; Letts, L. Gordon; Schroeder, Joseph D.; Tam, Sang William
PATENT ASSIGNEE(S): Nitromed, Inc., USA
SOURCE: PCT Int. Appl., 230 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001045703	A1	20010628	WO 2000-US35014	20001222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2393724	A1	20010628	CA 2000-2393724	20001222
US 2001041726	A1	20011115	US 2000-741816	20001222
US 6649629	B2	20031118		
EP 1246621	A1	20021009	EP 2000-989422	20001222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2000017037	A	20030610	BR 2000-17037	20001222
JP 2003523958	T	20030812	JP 2001-546642	20001222
NZ 519781	A	20040430	NZ 2000-519781	20001222
AU 782971	B2	20050915	AU 2001-25928	20001222
ZA 2002005707	A	20031111	ZA 2002-5707	20020717
US 2003220228	A1	20031127	US 2003-463671	20030618

PRIORITY APPLN. INFO.: US 1999-171623P P 19991223
US 2000-226085P P 20000818
US 2000-741816 A3 20001222
WO 2000-US35014 W 20001222

OTHER SOURCE(S): MARPAT 135:76524

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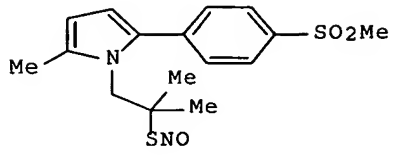


I

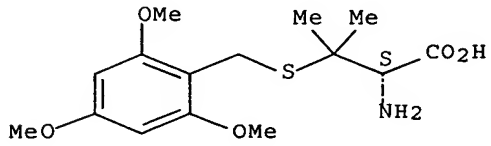
AB Title compds. were prepared Thus, MeCOCH:CH2 was condensed with 4-(MeS)C6H4CHO and the oxidized product cyclocondensed with Me2C(SH)CH2NH2 to give, after Me3CONO treatment, title compound I. Data for biol. activity of title compds. were given.

IT **346684-19-3P**
(preparation of nitrosated and nitrosylated cyclooxygenase-2 inhibitors)

RN 346684-19-3 HCAPLUS

CN D-Valine, 3-[[(2,4,6-trimethoxyphenyl)methyl]thio]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K031-40
ICS A61K031-415; A61K031-421; A61K031-50; C07D207-325; C07D231-06; C07D237-14; C07D263-04; C07D263-06

CC 21-2 (General Organic Chemistry)
Section cross-reference(s): 1

IT 15581-80-3P 28399-82-8P 40027-88-1P 73303-88-5P,
2-Methyl-2-mercapto-1-propanol 86864-60-0P 89031-84-5P
136881-95-3P 157672-00-9P 170571-19-4P 170571-20-7P
170571-71-8P 179174-91-5P 179174-92-6P 179174-93-7P
179174-94-8P 181695-72-7P 181695-81-8P 189501-33-5P
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346684-21-7P 347162-91-8P
(preparation of nitrosated and nitrosylated cyclooxygenase-2 inhibitors)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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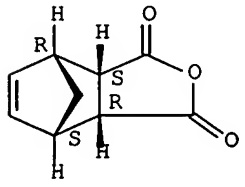
L52 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:896720 HCAPLUS Full-text
DOCUMENT NUMBER: 145:418438
TITLE: **Oxazaborolidinone**-catalyzed alkylative ring-opening reaction of cyclic anhydrides with methallylstannane
AUTHOR(S): Suzuki, Jun; Harada, Toshiro
CORPORATE SOURCE: Department of Chemistry and Materials Technology, Kyoto Institute of Technology, Matsugasaki, Sakyo-ku, Kyoto, 606-8585, Japan
SOURCE: Synthesis (2006), (15), 2483-2488
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In the presence of **oxazaborolidinones** (0.3 equiv), cyclic anhydrides undergo ring-opening reactions with tributylmethallylstannane to give 3-methylbut-3-enoylcarboxylic acids, which are converted to the corresponding acetylcarboxylic acids upon treatment with aqueous base.
IT **129-64-6**
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)
RN 129-64-6 HCAPLUS
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 21-2 (General Organic Chemistry)
ST cyclic anhydride methallylstannane stereoselective alkylative ring opening **oxazaborolidinone** catalyst; acetyl carboxylic ester stereoselective prepn
IT Ring opening
(alkylative, stereoselective; stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)
IT Anhydrides

(cyclic; stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT Esters, preparation
(keto; stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT Carboxylic acids, preparation
(oxo, esters; stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT Stereochemistry
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT Alkylation
Alkylation catalysts
Ring opening catalysts
(stereoselective; stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 912283-55-7P
(mol. and crystal structure; stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 912283-52-4P
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 873-51-8, Dichlorophenylborane 10294-34-5, Trichloroborane 110383-62-5
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 186379-01-1
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 912283-46-6P
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 109-63-7 **129-64-6** 935-79-5 2746-19-2 3886-69-9 4166-53-4 6982-25-8 13149-00-3 67883-62-9, Tributylmethallylstannane
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 912283-47-7P 912455-00-6P
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 762-72-1
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

IT 912283-48-8P 912283-49-9P 912283-50-2P 912283-51-3P 912283-53-5P 912283-56-8P 912283-57-9P
(stereoselective alkylative ring-opening of cyclic anhydrides with methallylstannane catalyzed by **oxazaborolidinone**)

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

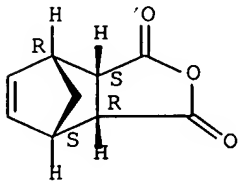
L52 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:581095 HCAPLUS Full-text
TITLE: Unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides: 7-oxa and 7-**aza** analogues

AUTHOR(S): Leont'eva, S. V.; Manulik, O. S.; Evstigneeva, E. M.; Bobkova, E. N.; Flid, V. R.
CORPORATE SOURCE: Lomonosov State Academy of Fine Chemical Technology, Moscow, 119571, Russia
SOURCE: Kinetics and Catalysis (2006), 47(3), 384-388
CODEN: KICAA8; ISSN: 0023-1584
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The catalytic allylation of 7-oxanorbornene, 7-**azanorbornene** , and bicyclo[2.2.2]octenoic anhydride was performed for the first time. The structures of allylation products and ratios between them were analogous to those for corresponding carbocyclic derivs. The presence of a substituent at the double bond of a substrate makes this reaction impossible. Comparative expts. were performed for evaluating the relative reactivity of double bonds in 7-oxanorbornene, 7- **azanorbornene**, and their carbocyclic analogs.

IT **129-64-6P**
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-**aza**- analogs)
RN 129-64-6 HCAPLUS
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 22-4 (Physical Organic Chemistry)
ST unconventional catalysis allylation norbornenedicarboxylic anhydride oxa **aza** analog
IT Allylation
Allylation catalysts
Double bond
Substituent effects
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-**aza**- analogs)
IT Anhydrides
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-**aza**- analogs)
IT 14806-35-0P
(attempted allylation; unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-**aza**- analogs)
IT 116-17-6, Triisopropoxyphosphine 603-35-0, Triphenylphosphine 3375-31-3, Palladium diacetate 12077-85-9
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-aza- analogs)
IT 591-87-7
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-**aza**- analogs)
IT **129-64-6P** 6766-44-5P 24327-08-0P 916904-80-8P

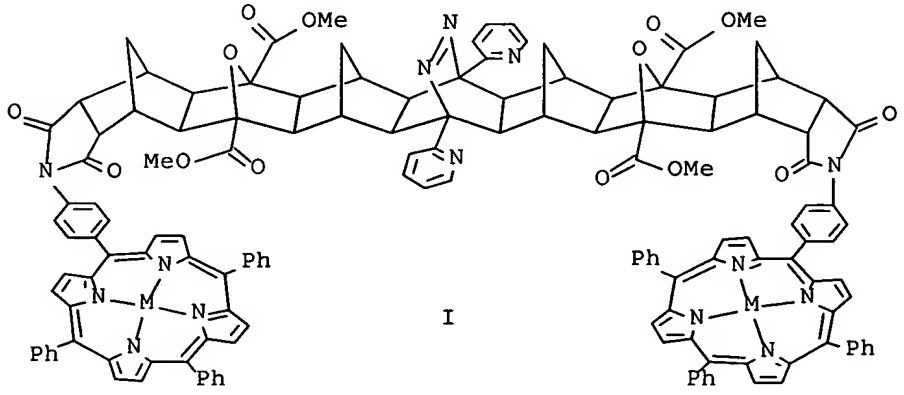
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-aza- analogs)

IT 96-39-9, 1-Methyl-1,3-cyclopentadiene 108-31-6, Maleic anhydride 109-97-7, Pyrrole 110-00-9, Furan 542-92-7, Cyclopentadiene 592-57-4, 1,3-Cyclohexadiene
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-aza- analogs)

IT 916904-81-9P 916904-82-0P 916904-83-1P 916904-84-2P 916904-85-3P 916904-86-4P 916904-87-5P 916904-88-6P
(unconventional catalytic allylation of 5-norbornene-2,3-dicarboxylic anhydrides and 7-oxa- and 7-aza- analogs)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:7497 HCAPLUS Full-text
DOCUMENT NUMBER: 145:54910
TITLE: Synthesis and Complexation Studies of a Convex Bis-porphyrin Tweezer-A Molecular Capsule Precursor
AUTHOR(S): Johnston, Martin R.; Lyons, Dani M.
CORPORATE SOURCE: Flinders University, Adelaide, 5042, Australia
SOURCE: Supramolecular Chemistry (2005), 17(7), 503-511
CODEN: SCHEER; ISSN: 1061-0278
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

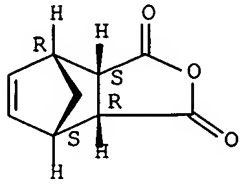
AB The synthesis and spectroscopic studies of a convex bis-porphyrin based mol. tweezer I (M = H2) are reported. The complexation of small bidentate ligands by metalated derivs. I (M = Zn) of the bis-porphyrin host were monitored through UV-visible and 1H NMR spectroscopy and yielded large association consts.

IT 129-64-6
(reactant for preparation of norbornylimido(aminophenyl)triphenylporphyrin)

RN 129-64-6 HCAPLUS
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-,

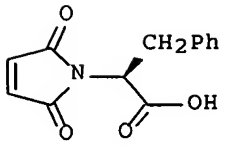
(3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 26, 68, 75
IT Formation constant
(association constant; for interaction of norbornyl substituted zinc (aminophenyl)triphenylporphyrins with pyrazine and **diazabicyclooctane**)
IT 889766-40-9
(association constant for interaction with pyrazine and **diazabicyclooctane**)
IT 280-57-9, 1,4-**Diazabicyclo**[2.2.2]octane 290-37-9, Pyrazine
(association with norbornyl substituted zinc (aminophenyl)triphenylporphyrins)
IT 889766-41-0P
(preparation and structure and association constant for interaction with pyrazine and **diazabicyclooctane**)
IT **129-64-6** 67605-64-5, 5-(4-Aminophenyl)-10,15,20-triphenylporphyrin
(reactant for preparation of norbornylimido(aminophenyl)triphenylporphyrin)
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1243388 HCAPLUS Full-text
DOCUMENT NUMBER: 145:27965
TITLE: Synthesis and properties of chiral N,N-maleoyl derivatives and Diels-Alder reactions with cyclopentadiene
AUTHOR(S): Bodtke, A.; Otto, H.-H.
CORPORATE SOURCE: Department of Pharmaceutical/Medicinal Chemistry, University of Greifswald, Greifswald, Germany
SOURCE: Pharmazie (2005), 60(11), 803-813
CODEN: PHARAT; ISSN: 0031-7144
PUBLISHER: Govi-Verlag Pharmazeutischer Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:27965
GI



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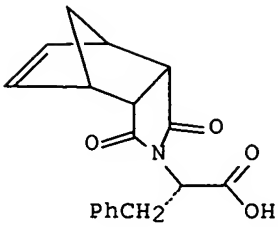


II

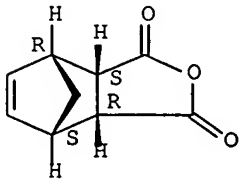
AB Maleyl amino acid derivs. were prepared from maleic anhydride and cyclized by reaction with ZnCl2 and **hexamethyldisilazane** yielding maleoyl derivs., e.g. I. These derivs. were used as dienophiles in cycloaddns. with cyclopentadiene. The isolated norbornene derivs., e.g. II, resulted from an endo addition, and might be interpreted as analogs of thalidomide. For comparing the properties of compds. prepared by this route, some reference compds. were synthesized from endo-bicyclo[2.2.1]hept-2-ene-5,6-dicarboxylic anhydride and amino acid derivs. All compds. were characterized by spectroscopic methods, their stereochem. is discussed, and results were compared with results from calcns.

IT **129-64-6**
(preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 28-23 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 22, 34

ST chiral maleoyl amino acid ester peptide ester prepn cyclization; maleic anhydride amino acid cyclization; **azatricyclic** compd asym synthesis Diels Alder cycloaddn; maleimide cyclopentadiene Diels Alder cycloaddn endo; NMR NOE chem shift conformational energy PM3 **azatricyclic** compd

IT Amino acids, preparation
(N,N-maleoyl amino acid derivs.; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT NMR (nuclear magnetic resonance)
(chemical shift; exptl. and calculated chemical shift values of **azatricyclic** compds.)

IT Imides
(cyclic, N,N-maleoyl amino acid, amino ester and peptide ester derivs.; preparation of chiral N,N-maleoyl derivs., and their

Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT Conformational potential
PM3 (molecular orbital method)
(energies and chemical shift values of **azatricyclic** compds. calculated by PM3)

IT Amino acids, preparation
(esters, N,N-maleoyl amino ester derivs.; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT Peptides, preparation
(esters, N,N-maleoyl peptide ester derivs.; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT Cyclic compounds
(imides, N,N-maleoyl amino acid, amino ester and peptide ester derivs.; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT Overhauser effect
(of an **azatricyclic** compound)

IT NMR (nuclear magnetic resonance)
(of **azatricyclic** compds.)

IT Asymmetric synthesis and induction
Cyclization
(preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT Tricyclic compounds
(preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT Diels-Alder reaction
(stereoselective; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT 889397-78-8P
(NOE and calculated energy and 1H-NMR shift values; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT 56-41-7, L-Alanine, reactions 63-91-2, L-Phenylalanine, reactions 64-04-0, 2-Phenylethylamine 72-18-4, L-Valine, reactions 73-32-5, L-Isoleucine, reactions 108-31-6, Maleic anhydride, reactions **129-64-6** 150-30-1, Phenylalanine 542-92-7, Cyclopentadiene, reactions 673-06-3, D-Phenylalanine 1738-76-7 1738-78-9 2491-20-5, Methyl L-alaninate hydrochloride 2577-90-4, Methyl L-phenylalaninate 3182-93-2, Ethyl L-phenylalaninate hydrochloride 3196-73-4 5619-07-8 5680-79-5, Methyl Glycinate hydrochloride 6066-82-6, N-Hydroxysuccinimide 6306-52-1, Methyl L-valinate hydrochloride 7524-50-7 13033-84-6, Methyl D-phenylalaninate hydrochloride 14019-62-6 14316-06-4, Methyl D-alaninate hydrochloride 27894-50-4 32213-95-9 34805-17-9 42854-62-6 50881-97-5 56612-25-0 81109-94-6 87892-68-0 95585-78-7 119290-61-8 889097-25-0
(preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT 6943-90-4P 39829-02-2P 52286-04-1P 55750-48-6P 55750-54-4P 57079-18-2P 62205-63-4P 62212-16-2P 96661-85-7P 111372-09-9P 148991-38-2P 149056-18-8P 164025-07-4P 164795-25-9P

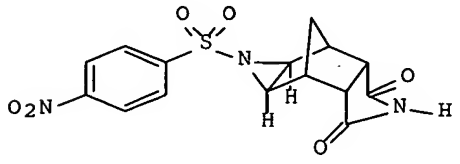
172960-29-1P 391913-17-0P 824393-54-6P 889096-99-5P
889097-00-1P 889097-01-2P 889097-05-6P 889097-07-8P
889097-08-9P 889097-09-0P 889097-11-4P 889097-12-5P
(preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT 1689-61-8P 22011-03-6P 149056-20-2P 159651-99-7P 160637-66-1P
164795-19-1P 213745-05-2P 307928-05-8P 889097-02-3P
889097-03-4P 889097-04-5P 889097-06-7P 889097-10-3P
889097-13-6P 889097-14-7P 889097-15-8P 889097-16-9P
889097-17-0P 889097-19-2P 889097-23-8P
(preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

IT 165305-65-7P 255843-91-5P 660439-22-5P 889097-18-1P
889097-20-5P 889097-21-6P 889097-22-7P
(1H-NMR shift values; preparation of chiral N,N-maleoyl derivs., and their Diels-Alder reactions with cyclopentadiene in the preparation of **azatricyclic** compds.)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:861922 HCAPLUS Full-text
DOCUMENT NUMBER: 142:280131
TITLE: Reactions of bicyclo[2.2.1]hept-5-ene-2,3-dicarboximides with aromatic azides
AUTHOR(S): Tarabara, I. N.; Kas'yan, A. O.; Yarovoi, M. Yu.; Shishkina, S. V.; Shishkin, O. V.; Kas'yan, L. I.
CORPORATE SOURCE: Dnepropetrovsk National University, Dnepropetrovsk, 49050, Ukraine
SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2004), 40(7), 992-998
CODEN: RJOCEQ; ISSN: 1070-4280
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:280131
GI



I

AB Reactions of N-substituted bicyclo[2.2.1]hept-5-ene-endo-2,endo-3-dicarboximides with nitrophenyl azides, as well as with p-nitrophenylsulfonyl azide and p-toluenesulfonyl azide, afforded the corresponding substituted dihydrotriazole (from aryl azides) and arylsulfonylaziridine derivs., e.g., I, (from sulfonyl azides). The exo orientation of the nitrogen-containing cyclic

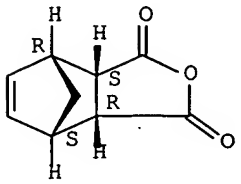
fragments (in keeping with the Alder rule) and endo orientation of the imide ring were confirmed by anal. of the IR and 1H and 13C NMR spectra. The mol. structure of one of the products was examined by X-ray anal.

IT **129-64-6**, Endic anhydride
(preparation of bicycloheptenedicarboximides via amination of endic anhydride with amines in the preparation of tricyclic compds.)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 75

ST endic acid imide aryl azide cyclization; **tetraazatricyclotridecenedione** stereoselective prepn; **diazatricycloundecanedione** stereoselective prepn

IT Cycloaddition reaction
(aziridination, stereoselective; stereoselective preparation of (arylsulfonyl)**diazatricycloundecanediones** via stereoselective cyclization of bicycloheptenedicarboximides with arylsulfonyl azides)

IT Crystal structure
Molecular structure
(of (nitrophenyl)**tetraazatricyclotridecenedione**)

IT Stereoselective synthesis
(stereoselective preparation of (arylsulfonyl) **diazatricycloundecanediones** via stereoselective cyclization of bicycloheptenedicarboximides with arylsulfonyl azides)

IT Tricyclic compounds
(stereoselective preparation of (nitrophenyl) **tetraazatricyclotridecenedione** via stereoselective cyclization of bicycloheptenedicarboximides with nitrophenyl azides)

IT Cyclization
(stereoselective; stereoselective preparation of (nitrophenyl) **tetraazatricyclotridecenedione** via stereoselective cyclization of bicycloheptenedicarboximides with nitrophenyl azides)

IT 100-01-6, reactions
(of (nitrophenyl)**tetraazatricyclotridecenedione**)

IT 75-31-0, Isopropylamine, reactions 75-64-9, reactions 95-68-1, 2,4-Dimethylaniline **129-64-6**, Endic anhydride 504-29-0, 2-Aminopyridine
(preparation of bicycloheptenedicarboximides via amination of endic anhydride with amines in the preparation of tricyclic compds.)

IT 847225-18-7P
(stereoselective preparation and crystal structure of (nitrophenyl) **tetraazatricyclotridecenedione** via stereoselective

cyclization of bicycloheptenedicarboximide with nitrophenyl azide)
IT 941-55-9, 4-Methylphenylsulfonyl azide 4547-62-0, 4-Nitrophenylsulfonyl azide
(stereoselective preparation of (arylsulfonyl) **diazatricycloundecanediones** via stereoselective aziridination of bicycloheptenedicarboximides with arylsulfonyl azides)
IT 776295-81-9P 847225-30-3P 847225-31-4P 847225-32-5P 847225-33-6P 847225-34-7P 847225-35-8P 847225-36-9P
(stereoselective preparation of (arylsulfonyl) **diazatricycloundecanediones** via stereoselective aziridination of bicycloheptenedicarboximides with arylsulfonyl azides)
IT 72657-51-3 455272-65-8
(stereoselective preparation of (nitrophenyl) **tetraazatricyclotridecenedione** via stereoselective cyclization of bicycloheptenedicarboximides with nitrophenyl azides)
IT 95-76-1 106-49-0, reactions 1516-58-1, 2-Nitrophenylazide 1516-60-5, 4-Nitrophenylazide 6265-30-1 72657-49-9 75715-21-8
(stereoselective preparation of (nitrophenyl) **tetraazatricyclotridecenediones** via stereoselective cyclization of bicycloheptenedicarboximides with nitrophenyl azides)
IT 847225-19-8P 847225-20-1P 847225-21-2P 847225-22-3P 847225-23-4P 847225-24-5P 847225-25-6P 847225-26-7P 847225-27-8P 847225-28-9P 847225-29-0P
(stereoselective preparation of (nitrophenyl) **tetraazatricyclotridecenediones** via stereoselective cyclization of bicycloheptenedicarboximides with nitrophenyl azides)
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:953414 HCAPLUS Full-text
DOCUMENT NUMBER: 138:368701
TITLE: Synthesis, Structure, and Transformations of New Endic Anhydride Derivatives
AUTHOR(S): Tarabara, I. N.; Kas'yan, A. O.; Krishchik, O. V.; Shishkina, S. V.; Shishkin, O. V.; Kas'yan, L. I.
CORPORATE SOURCE: Dnepropetrovsk National University, Kharkov, 61001, Ukraine
SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2002), 38(9), 1299-1308
CODEN: RJOCEQ; ISSN: 1070-4280
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:368701
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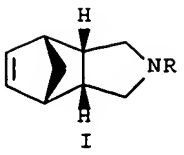

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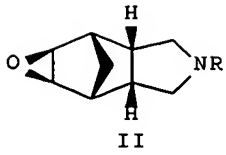


II

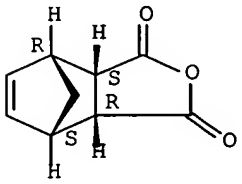
AB 4-**Azatricyclo**[5.2.1.0]dec-8-ene and its N-Ph derivative I (R = H, Ph) were synthesized by reaction of endic anhydride with NH3 or 4-iodoaniline, transformation of the amido acids thus obtained to imides, and subsequent reduction of the latter with lithium aluminum hydride. The unsubstituted tricyclic amine I (R = H) was brought into reactions with electrophilic reagents: p-toluenesulfonyl chloride, p-toluoyl chloride, m-tolyl isocyanate, Ph isothiocyanate, and endic anhydride to obtain a number of new derivs. I (R = 4-MeC6H4SO2, 4-MeC6H4CO, 3-MeC6H4NHCO, etc.); also, the corresponding salt with 1-adamantanecarboxylic acid was isolated. N-(p-Tolylsulfonyl)- and N-(m-tolylcarbamoyl)-4-**azatricyclo**-[5.2.1.0]dec-8-enes were oxidized to the corresponding 8,9-epoxy derivs. II (R = 4-MeC6H4SO2, 3-MeC6H4NHCO) with monoperoxyphthalic acid. The structure of the products was confirmed by the data of IR, 1H and 13C NMR, and mass spectra. The mol. structures of N-(p-iodophenyl)bicyclo[2.2.1]hept-2- ene-endo-5,endo-6-dicarboximide and N-phenyl-4-**azatricyclo** [5.2.1.0]dec-8-ene were established by X-ray anal.

IT **129-64-6**, Endic anhydride
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 27-11 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 75

ST mol crystal structure iodophenylbicycloheptenedicarboximide **phenylazatricyclodecene** prepn; **azatricyclodecene** deriv prepn endic anhydride amine; tricyclodecene **aza** deriv prepn endic anhydride amine; **epoxyazatricyclodecane** prepn; **azatricyclodecane** epoxy prepn

IT Crystal structure
Molecular structure
(of (iodophenyl)bicyclo[2.2.1]heptenedicarboximide and **phenylazatricyclo**[5.2.1.0]decene)

IT Amines, preparation
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines)

IT 98-59-9, p-Toluenesulfonyl chloride 103-72-0, Phenyl isothiocyanate

129-64-6, Endic anhydride 540-37-4, p-Iodoaniline
621-29-4, m-Tolyl isocyanate 828-51-3, 1-Adamantanecarboxylic acid
874-60-2, p-Toluoyl chloride
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines)

IT 6265-30-1P 40594-05-6P 521301-26-8P 521301-36-0P
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines)

IT 521301-28-0P 521301-29-1P 521301-30-4P 521301-31-5P
521301-32-6P 521301-33-7P 521301-34-8P 521301-35-9P
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines)

IT 521301-37-1P
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines, and crystal structure)

IT 521301-27-9P
(preparation of 4-**azatricyclo**[5.2.1.0]dec-8-enes and their 8,9-epoxy derivs. via reactions of endic anhydride with amines, and crystal structure)

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:487123 HCAPLUS Full-text
DOCUMENT NUMBER: 131:130740
TITLE: Cleavable diepoxide for removable epoxy potting compositions for electronic parts
INVENTOR(S): Buchwalter, Stephen Leslie; Kuczynski, Joseph Paul; Stephanie, John Gregory
PATENT ASSIGNEE(S): International Business Machines Corporation, USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5932682	A	19990803	US 1995-574806	19951219
US 6258899	B1	20010710	US 1999-287323	19990407
PRIORITY APPLN. INFO.:			US 1995-574806	A3 19951219

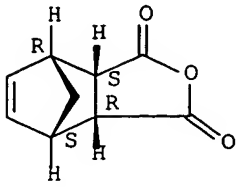
AB A cleavable epoxy resin composition, suitable for encapsulating electronic chips, comprises the cured reaction product of an acetal/ketal diepoxide, a cyclic dicarboxylic anhydride curing agent mixture, and 1,3-**diaza** catalyst compound such as imidazole, optionally in combination with a tertiary amine catalyst different from the **diaza** compound The composition may include an optional hydroxy functional compound capable of reacting with the cyclic anhydrides to form a half ester thereby initiating the reaction between the diepoxide and the cyclic dicarboxylic anhydride curing agent. Thus, a suitable acetal diepoxide is acetaldehyde bis(3,4-cyclohexylmethyl) diepoxide and a crosslinker is hexahydrophthalic anhydride.

IT 129-64-6, Nadic anhydride
(cleavable diepoxide for acid/solvent removable epoxy compns. containing crosslinker)

RN 129-64-6 HCAPLUS
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-,

(3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C08G059-68
INCL 528094000
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 76
IT 85-42-7, Hexahydrophthalic anhydride 85-43-8, Tetrahydrophthalic anhydride 108-31-6, Maleic anhydride, uses **129-64-6**, Nadic anhydride 552-30-7, Trimellitic anhydride 2561-85-5, Dodecylsuccinic anhydride 25134-21-8, Nadic methyl anhydride 25550-51-0, Methylhexahydrophthalic anhydride 26590-20-5, Methyltetrahydrophthalic anhydride
(cleavable diepoxide for acid/solvent removable epoxy compns. containing crosslinker)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:621208 HCAPLUS Full-text
DOCUMENT NUMBER: 129:260473
TITLE: Ring-opening metathesis of bicyclic alkenes and application to the preparation of combinatorial libraries and potential antibacterial agents
INVENTOR(S): Cuny, Gregory D.; Cao, Jingrong; Hauske, James R.
PATENT ASSIGNEE(S): Sepracor, Inc., USA
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9840373	A1	19980917	WO 1998-US5021	19980313
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6177464	B1	20010123	US 1997-818197	19970314
CA 2283182	A1	19980917	CA 1998-2283182	19980313

AU 9864644	A	19980929	AU 1998-64644		19980313
AU 739514	B2	20011011			
EP 966457	A1	19991229	EP 1998-910393		19980313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2001521494	T	20011106	JP 1998-539873		19980313
US 2001034341	A1	20011025	US 2001-767373		20010123
US 2002042406	A1	20020411	US 2001-767376		20010123
US 6486324	B2	20021126			
PRIORITY APPLN. INFO.:			US 1997-818197	A	19970314
			WO 1998-US5021	W	19980313

OTHER SOURCE(S): CASREACT 129:260473; MARPAT 129:260473
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

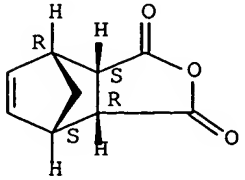
AB Methods for performing ring-opening cross-metathesis reactions on solid supports are disclosed. Substituted cyclic compds. prepared via the methods are disclosed, as well as libraries of the compds., and methods of using them to treat bacterial infections. In particular, compds. I [X, Y = bond, O, S, (un)substituted NH, CH2, CH2O, etc.; R1, R2 = H, halo, (un)substituted alk(en/yn)yl, aryl, NH2, OH, aroyl, CO2H, alkoxy, etc.; or R1R2 = O, S; R3, R4 = H, halo, cyano, NO2, stannyl, silyl, (un)substituted alk(en/yn)yl, aryl, etc.; substituents may include a linker to a solid support; with provisos], either as individuals or libraries, are prepared by cross-metathesis of bicyclic alkenes II with alkenes R3CH:CHR4. The bicyclic products III [R5 = H, (un)substituted alk(en/yn)yl, aryl, alkanoyl, heterocyclyl, etc.; R6, R7 = H; or R6R7 = O], formed by further cyclization of I, are obtained in some cases. For instance, metathesis of the bicyclic alkene IV (W = Wang resin) underwent metathesis with 4-vinylanisole in the presence of (Cy3P)2Cl2Ru:CHPh catalyst, followed by cleavage with CF3CO2H, to give a mixture of target compound V and its metathesis regioisomer in 68.3% overall yield. This mixture showed modest activity against one or more of S. aureus, methicillin-resistant S. Aureus, and vancomycin-resistant E. faecium, in vitro. Use of the method to prepare a library of up to 4608 compds. is described.

IT **129-64-6**, cis-5-Norbornene-endo-2,3-dicarboxylic anhydride
(starting material; preparation of potential antibacterials and combinatorial libraries by ring-opening metathesis of bicyclic alkenes)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C07D307-93
ICS C07D295-20; C07D295-18; C07C235-40; C07C271-20; C07D207-26; C07D221-04; C07D491-04; A61K031-34; A61K031-495; C07D491-04; C07D307-00; C07D221-00
CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
IT 109-73-9, n-Butylamine, reactions 109-76-2, 1,3-Propanediamine 110-85-0, Piperazine, reactions 129-64-6, cis-5-Norbornene-endo-2,3-dicarboxylic anhydride 637-69-4 2039-85-2, 3-Chlorostyrene 2393-23-9, 4-Methoxybenzylamine 4883-79-8, cis-Monomethyl 5-norbornene-endo-2,3-dicarboxylate 6118-51-0, exo-3,6-Epoxy-1,2,3,6-tetrahydrophthalic anhydride 49805-30-3, 2-Azabicyclo[2.2.1]hept-5-en-3-one
(starting material; preparation of potential antibacterials and combinatorial libraries by ring-opening metathesis of bicyclic alkenes)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:169160 HCAPLUS Full-text
DOCUMENT NUMBER: 126:199454
TITLE: Preparation of cyclic imides as inhibitors of tumor necrosis factor α
INVENTOR(S): Muller, George W.
PATENT ASSIGNEE(S): Celgene Corporation, USA
SOURCE: U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 87,510, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5605914	A	19970225	US 1994-258587	19940610
US 5463063	A	19951031	US 1993-140237	19931020
CA 2531868	A1	19950112	CA 1994-2531868	19940701
EP 1004580	A2	20000531	EP 2000-200491	19940701
EP 1004580	A3	20021002		
EP 1004580	B1	20061220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
EP 1004581	A2	20000531	EP 2000-200492	19940701
EP 1004581	A3	20020814		
EP 1004581	B1	20040922		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
EP 1004572	A2	20000531	EP 2000-200498	19940701
EP 1004572	A3	20021002		
EP 1004572	B1	20060308		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
EP 1477486	A2	20041117	EP 2004-77075	19940701
EP 1477486	A3	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				

US 5698579	A	19971216	US 1996-703708	19960827
US 5877200	A	19990302	US 1997-920715	19970829
US 6075041	A	20000613	US 1998-158612	19980922
US 6200987	B1	20010313	US 2000-547085	20000411
US 2003144325	A1	20030731	US 2003-337602	20030106
US 7119106	B2	20061010		
US 2006160854	A1	20060720	US 2005-280333	20051117
JP 2006131647	A	20060525	JP 2006-39629	20060216
JP 2006169261	A	20060629	JP 2006-39624	20060216
JP 2006188529	A	20060720	JP 2006-39633	20060216
JP 2006188530	A	20060720	JP 2006-39637	20060216
US 2006178402	A1	20060810	US 2006-401862	20060412
US 2006183910	A1	20060817	US 2006-401858	20060412

PRIORITY APPLN. INFO.:

US 1993-87510	B2	19930702
US 1993-140237	A2	19931020
US 1994-258587	A2	19940610
CA 1994-2166315	A3	19940701
EP 1994-921439	A3	19940701
EP 2000-200492	A3	19940701
JP 1995-503648	A3	19940701
US 1996-703708	A3	19960827
US 1997-920715	A3	19970829
US 1998-158612	A3	19980922
US 1999-230389	A3	19990507
US 2000-543809	A1	20000406
US 2001-781179	A1	20010212
US 2003-337602	A3	20030106

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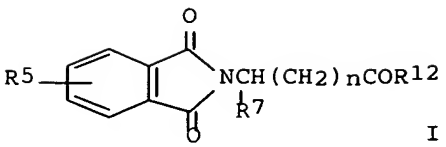

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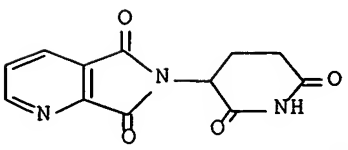
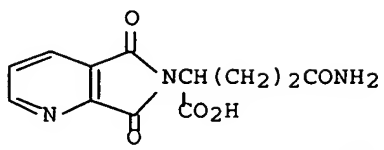


II



III

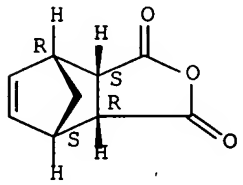
AB Cyclic imides, such as I [R5 = H, NO2, CN, CF3, CO2Et, CO2Me, CO2Pr, Ac, CONH2, AcO, CO2H, OH, NH2, alkyl, alkoxy, halo; R7 = pyridyl, substituted Ph, (un)substituted benzyl, naphthyl, benzyloxy, imidazol-4-ylmethyl; R12 = amino, OH, ester; n = 0-3], are inhibitors of tumor necrosis factor α and can be used to combat cachexia, endotoxic shock, and retrovirus replication. Thus, I (R5 = H, R7 = 4-MeOC6H4, R12 = NH2, n = 1) was prepared from 3-(4-MeOC6H4)CH(NH2)CH2CO2H and N-(carboethoxy)phthalimide via amidation of the phthalimidopropionic acid. Also, 2-(2,6-dioxo-3-piperidinyl)-4-**azaisoindoline**-1,3-dione (II) was prepared from L-glutamine and 2,3-pyridinedicarboxylic anhydride via intramol. cyclization of glutaramic acid III.

IT **129-64-6**, endo-cis-5-Norbornene-2,3-dicarboxylic anhydride
(preparation of cyclic imides as inhibitors of tumor necrosis factor α)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C07D209-48
ICS A61K031-40

INCL 514339000

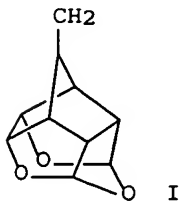
CC 27-11 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 34, 63

ST imide cyclic TNF alpha inhibitor prepn; tumor necrosis factor alpha inhibitor prepn; **azaisoindolinedione** dioxopiperidinyl TNF alpha inhibitor prepn

IT 56-12-2, 4-Aminobutyric acid, reactions 56-85-9, L-Glutamine, reactions 71-00-1, Histidine, reactions 75-04-7, Ethylamine, reactions 100-46-9, Benzylamine, reactions 100-52-7, Benzaldehyde, reactions 100-55-0, 3-Pyridylcarbinol 103-71-9, Phenyl isocyanate, reactions 107-95-9, β-Alanine 110-58-7, Amylamine 117-08-8, Tetrachlorophthalic anhydride **129-64-6**, endo-cis-5-Norbornene-2,3-dicarboxylic anhydride 150-30-1, DL-Phenylalanine 328-39-2, Leucine 641-70-3, 3-Nitrophthalic acid anhydride 643-79-8, 1,2-Benzenedicarboxaldehyde 699-98-9, 2,3-Pyridinedicarboxylic anhydride 875-74-1 942-06-3, 4,5-Dichlorophthalic anhydride 1664-54-6, 3-Amino-3-phenylpropionic acid 1668-10-6, Glycinamide hydrochloride 2627-86-3, (S)-α-Methylbenzylamine 2835-06-5 2935-35-5, (S)-Phenylglycine 3731-52-0, 3-Aminomethylpyridine 3886-69-9 4664-08-8, Pyridine-3,4-dicarboxylic acid anhydride 5466-84-2, 4-Nitrophthalic acid anhydride 5678-45-5, 3-Amino-3-(4-methoxyphenyl)propionic acid 7292-73-1, (4-Fluorophenyl)glycine 13149-00-3, cis-1,2-Cyclohexanedicarboxylic anhydride 19438-61-0,

4-Methylphthalic acid anhydride 22509-74-6, N-(Carboethoxy)phthalimide 30461-77-9 34840-96-5, 3-Amino-3-(3,4-diethoxyphenyl)propionic acid 34841-09-3, 3-Amino-3-(3,4-dimethoxyphenyl)propionic acid 38499-22-8 38499-24-0, 3-Amino-3-(4-propoxyphenyl)propionic acid 54503-16-1, 3-Amino-3-(3,4-dimethoxyphenyl)propionic acid hydrochloride 62247-21-6, 3-Amino-3-(3-pyridyl)propionic acid 62247-22-7 65864-22-4, L-Phenylalaninamide hydrochloride 68208-19-5, 3-Amino-3-(3-methoxyphenyl)propionic acid 80971-95-5, 3-Amino-3-(4-cyanophenyl)propionic acid 80971-96-6, 3-Amino-3-(3-cyanophenyl)propionic acid 84145-28-8, (2-Fluorophenyl)glycine 88831-43-0 103095-63-2, 3-Amino-3-(2-methoxyphenyl)propionic acid 124082-17-3, 3-Amino-3-(4-methoxyphenyl)propionic acid methyl ester hydrochloride 129042-57-5, 3-Amino-3-(2-naphthyl)propionic acid 167887-35-6 167887-36-7 167887-37-8 167887-38-9
(preparation of cyclic imides as inhibitors of tumor necrosis factor α)

L52 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:704882 HCAPLUS Full-text
DOCUMENT NUMBER: 126:47204
TITLE: Synthesis of 3,5,7-trioxapentacyclo[7.2.1.02,8.04,11.06,10]dodecane. A novel diacetal trioxa-cage
AUTHOR(S): Tsai, Shih-Hwa; Wu, Hsien-Jen; Chung, Wen-Sheng
CORPORATE SOURCE: Dep. Applied Chem., Natl. Chiao Tung Univ., Hsinchu, Taiwan
SOURCE: Journal of the Chinese Chemical Society (Taipei) (1996), 43(5), 445-449
CODEN: JCCTAC; ISSN: 0009-4536
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

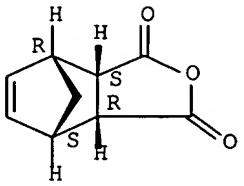
AB The 3,5,7-trioxapentacyclo[7.2.1.02,8.04,11.06,10]dodecane cage compound I (a parent compound for novel diacetal trioxa cages), was synthesized starting from (3aα,4α,7α,7aα)-3a,4,7,7a- tetrahydro--4,7-methanoisobenzofuran-1,3-dione in a four-step sequence. Attempts for the synthesis of an aza analog of I failed.

IT **129-64-6**
(preparation of dioxapentacyclododecane cage compound)

RN 129-64-6 HCAPLUS

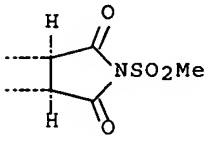
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

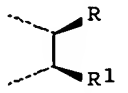


CC 28-23 (Heterocyclic Compounds (More Than One Hetero Atom))
IT **129-64-6** **3526-89-4** **29377-36-4**
(preparation of dioxapentacyclododecane cage compound)

L52 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:322775 HCAPLUS Full-text
DOCUMENT NUMBER: 125:195018
TITLE: Nonreductive enantioselective ring opening of N-(methylsulfonyl)dicarboximides with diisopropoxytitanium α,α,α',.alpha.'-tetraaryl-1,3-dioxolane-4,5-dimethanolate
AUTHOR(S): Ramon, Diego J.; Guillena, Gabriela; Seebach, Dieter
CORPORATE SOURCE: Laboratorium Organische Chemie, Univ. Zurich, Zurich, CH-8092, Switz.
SOURCE: Helvetica Chimica Acta (1996), 79(3), 875-894
CODEN: HCACAV; ISSN: 0018-019X
PUBLISHER: Verlag Helvetica Chimica Acta
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:195018
GI



I



II

AB Bi- and tricyclic meso-N-(methylsulfonyl)dicarboximides of type I are converted enantioselectively to the resp. mono- and bicyclic [(sulfonamido)carbonyl]carboxylates of type II (R = CO2CHMe2, R1 = CONHSO2Me) by diisopropoxytitanium TADDOLate (75-92% yield). The enantiomer ratios of the products are between 86:14 and 97:3. Recrystn. from CH2Cl2/hexane leads to enantiomerically pure products. The enantioselectivity shows a linear relationship with the enantiomer excess of the TADDOL employed. Reduction of the ester and carboxamide groups and addnl. reductive cleavage of the sulfonamido group gives hydroxy sulfonamides and amino alcs. of type II (R = CH2OH; R1 = NHSO2Me) and II (R = CH2OH; R1 = CH2NH2), resp. The absolute configuration of the sulfonamido esters is determined by chemical correlation, by the x-ray anal. of a camphanate of a hydroxy sulfonamide, and by comparative 19F-NMR anal. of the Mosher esters of the hydroxy sulfonamides. A

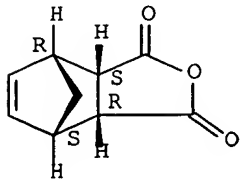
general proposal for the assignment of the absolute configuration of primary alcs. and amines of Formula HXCH2CHRR1 (X = O, NH), is suggested. From the assignment of the configuration of the sulfonamido esters follows that the Re carbonyl group of the original imide I is converted to an iso-Pr ester group. This result is compatible with a rule previously put forward for the stereochem. course of reactions involving Ti TADDOLate activated chelating electrophiles. A tentative mechanistic model is proposed.

IT **129-64-6**
(nonreductive enantioselective ring opening of N-(methylsulfonyl)dicarboximides with diisopropoxytitanium TADDOLate)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 24-1 (Alicyclic Compounds)
Section cross-reference(s): 21

IT 99-33-2, 3,5-Dinitrobenzoyl chloride **129-64-6** 546-68-9, Tetra(isopropoxy)titanium 935-79-5 3144-16-9, Camphorsulfonic acid 4462-96-8, 3-Oxabicyclo[3.2.0]heptane-2,4-dione 7131-66-0 14180-96-2 39637-74-6 130931-83-8 137365-09-4 180790-36-7, 2-Oxabicyclo[2.2.1]hept-5-en-3-one
(nonreductive enantioselective ring opening of N-(methylsulfonyl)dicarboximides with diisopropoxytitanium TADDOLate)

IT 1122-09-4P, 3-**Azabicyclo**[3.2.0]heptane-2,4-dione 6265-30-1P 85922-86-7P 180790-14-1P 180790-15-2P 180790-16-3P 180790-17-4P 180790-18-5P 180790-19-6P 180790-20-9P 180790-21-0P 180790-22-1P 180790-23-2P 180790-24-3P 180790-25-4P 180790-26-5P 180790-27-6P 180790-28-7P 180790-29-8P 180790-30-1P 180790-31-2P 180790-32-3P 180790-34-5P 180790-35-6P 180979-41-3P 180979-42-4P 181136-52-7P
(nonreductive enantioselective ring opening of N-(methylsulfonyl)dicarboximides with diisopropoxytitanium TADDOLate)

L52 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:237489 HCAPLUS Full-text

DOCUMENT NUMBER: 124:289287

TITLE: Preparation of **azanoradamantane** benzamides

INVENTOR(S): Becker, Daniel Paul; Flynn, Daniel Lee; Moormann, Alan Edward; Villamil, Clara Ines

PATENT ASSIGNEE(S): G. D. Searle and Co., USA

SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9600729	A2	19960111	WO 1995-US6599	19950612
WO 9600729	A3	19960215		
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5541344	A	19960730	US 1995-444489	19950519
US 5650535	A	19970722	US 1995-444490	19950519
AU 9527623	A	19960125	AU 1995-27623	19950612
US 5717098	A	19980210	US 1996-681139	19960722
PRIORITY APPLN. INFO.:			US 1994-269412 A	19940630
			WO 1995-US6599 W	19950612

OTHER SOURCE(S): CASREACT 124:289287; MARPAT 124:289287
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

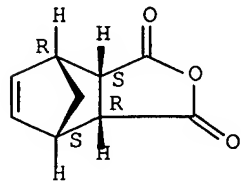
AB γ-Lactones I [R = Ts, t-BuCO, Ph3C] were prepared Oxidative cleavage of (-)-II with ozone followed by reduction with NaBH4 afforded I [R = Ts] quant. Ammonolysis of I [R = Ts] followed by amide reduction, protection and deprotection of the γ-lactone gave a single enantiomer of **aminoazanoradamantane** III which was coupled with 4-amino-5-chloro-2-methoxybenzoic acid (IV) to produce benzamide V. **Aminomethylazanoradamantane** VI was also prepared and coupled with IV to afford corresponding benzamide VII. Compds. V and VII can be useful as 5-HT agonists or antagonists (no data).

IT **129-64-6**, cis-5-Norbornene-endo-2,3-dicarboxylic anhydride (preparation of **azanoradamantane** benzamides)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C07D471-18
ICS C07D307-93; C07C067-347

CC 27-21 (Heterocyclic Compounds (One Hetero Atom))

ST **azanoradamantane** benzamide prepn serotonin agonist antagonist; lactone gamma prepn stereoselective; **aminoazanoradamantane** prepn enantioselective stereoselective; **aminomethylazanoradamantane** prepn; oxidative cleavage tosylaminobicycloheptenecarboxylic acid ozone; heterocyclization dihydroxymethyl cyclopentane aminomethyltosylamino

IT Ring closure and formation
(heteroannulation, stereospecific; preparation of **azanoradamantane** benzamides)

IT Bond cleavage
(oxidative, with ozone; preparation of **azanoradamantane** benzamides)

IT 64-19-7, Acetic acid, reactions 98-59-9, p-Toluenesulfonyl chloride 100-39-0, Benzyl bromide **129-64-6**, cis-5-Norbornene-endo-2,3-dicarboxylic anhydride 542-92-7, Cyclopentadiene, reactions 618-36-0, α-Methylbenzylamine 627-63-4, Fumaryl chloride 687-47-8, Ethyl (S)-lactate 7206-70-4 7440-66-6, Zinc, reactions 7664-41-7, Ammonia, reactions 7719-09-7, Thionyl chloride 10028-15-6, Ozone, reactions 16940-66-2, Sodium borohydride 24424-99-5, Di-tert-butyl dicarbonate 27126-76-7, HTIB 58632-95-4 175464-39-8
(preparation of **azanoradamantane** benzamides)

IT 111293-18-6P 111293-23-3P 111407-53-5P 125226-89-3P 147600-74-6P 165874-34-0P 175464-22-9P 175464-23-0P 175464-24-1P 175464-25-2P 175464-26-3P 175464-27-4P 175464-28-5P 175464-29-6P 175464-30-9P 175464-31-0P 175464-32-1P 175464-33-2P 175464-34-3P 175464-35-4P 175464-36-5P 175464-37-6P 175464-38-7P 175464-48-9P 175464-49-0P 175464-50-3P 175670-08-3P 175670-09-4P 175670-10-7P 175670-11-8P
(preparation of **azanoradamantane** benzamides)

IT 130794-02-4P 139228-16-3P 139228-24-3P 139255-61-1P 155486-13-8P 175464-40-1P 175464-41-2P 175464-42-3P 175464-43-4P 175464-44-5P 175464-45-6P 175464-46-7P 175464-47-8P 175670-12-9P 175670-13-0P 175670-14-1P 175670-15-2P 175670-16-3P 175670-17-4P 175670-18-5P 175670-19-6P 175773-85-0P 175773-86-1P
(preparation of **azanoradamantane** benzamides)

L52 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:88646 HCAPLUS Full-text
DOCUMENT NUMBER: 118:88646
TITLE: Heat capacities and entropies of organic compounds in the condensed phase. Volume II
AUTHOR(S): Domalski, Eugene S.; Hearing, Elizabeth D.
CORPORATE SOURCE: Cent. Chem. Phys., Natl. Inst. Stand. Technol., Gaithersburg, MD, 20899, USA
SOURCE: Journal of Physical and Chemical Reference Data (1990), 19(4), 881-1047
CODEN: JPCRBU; ISSN: 0047-2689
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

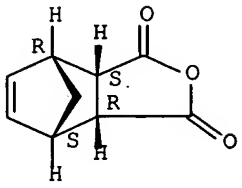
AB A review with 565 refs. including heat capacities, entropies, and thermodn. parameters for phase transitions for >1100 organic compds.

IT **129-64-6**
(thermodn. properties of)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 69-0 (Thermodynamics, Thermochemistry, and Thermal Properties)
Section cross-reference(s): 22

IT 108-95-2, Phenol, properties 109-05-7, 2-Methylpiperidine 109-06-8, 2-Methylpyridine 109-21-7, Butyl butanoate 109-55-7, N,N-Dimethyl-1,3-propanediamine 109-60-4, Propyl acetate 109-67-1, 1-Pentene 109-69-3, 1-Chlorobutane 109-77-3, Malononitrile 109-79-5, 1-Butanethiol 109-99-9, properties 110-02-1, Thiophene 110-49-6, 2-Methoxyethanol acetate 110-54-3, Hexane, properties 110-56-5, 1,4-Dichlorobutane 110-58-7, Pentylamine 110-59-8, Pentanenitrile 110-61-2, Succinonitrile 110-62-3, Valeraldehyde 110-63-4, 1,4-Butanediol, properties 110-74-7, Propyl formate 110-82-7, Cyclohexane, properties 110-83-8, Cyclohexene, properties 110-85-0, Piperazine, properties 110-88-3, 1,3,5-Trioxane, properties 110-89-4, Piperidine, properties 110-91-8, Morpholine, properties 110-93-0, 6-Methyl-5-hepten-2-one 110-96-3, Diisobutylamine 111-15-9, 2-Ethoxyethanol acetate 111-27-3, 1-Hexanol, properties 111-31-9, 1-Hexanethiol 111-40-0, Diethylenetriamine 111-42-2, properties 111-46-6, Diethylene glycol, properties 111-55-7, Ethylene glycol diacetate 111-65-9, Octane, properties 111-70-6, Heptyl alcohol 111-71-7, Heptanal 111-76-2, 3-Oxa-1-heptanol 111-78-4, Cycloocta-1,5-diene 111-84-2, Nonane 111-87-5, 1-Octanol, properties 111-88-6, 1-Octanethiol 111-96-6, Diglyme 112-24-3 112-27-6 112-31-2, Decanal 112-34-5, 2-(2-Butoxyethoxy)ethanol 112-40-3, Dodecane 112-55-0, 1-Dodecanethiol 112-57-2, Tetraethylenepentamine 112-60-7, Tetraethylene glycol 112-95-8, Eicosane 113-59-7, Chlorprothixene 115-07-1, 1-Propene, properties 115-11-7, Isobutene, properties 115-18-4, 2-Methyl-3-buten-2-ol 115-25-3, Octafluorocyclobutane 115-77-5, Pentaerythritol, properties 115-86-6 116-11-0, 2-Methoxy-1-propene 117-81-7, Di(2-ethylhexyl) phthalate 117-84-0, Dioctyl phthalate 118-79-6, 2,4,6-Tribromophenol 119-61-9, Benzophenone, properties 119-65-3, Isoquinoline 120-72-9, 1H-Indole, properties 120-80-9, 1,2-Dihydroxybenzene, properties 120-82-1, 1,2,4-Trichlorobenzene 120-83-2, 2,4-Dichlorophenol 121-46-0, Bicyclo[2.2.1]hepta-2,5-diene 122-60-1, Phenyl glycidyl ether 122-96-3, 1,4-Piperazinediethanol 123-31-9, Hydroquinone, properties 123-38-6, Propanal, properties 123-39-7, N-Methylformamide 123-80-8 123-86-4, Butyl acetate 123-91-1, 1,4-Dioxane, properties 123-95-5, Butyl octadecanoate 124-04-9, Hexanedioic acid, properties 124-13-0, Octanal 124-18-5, Decane 124-19-6, Nonanal 124-70-9, Dichloromethylvinylsilane 124-73-2, 1,2-Dibromotetrafluoroethane 126-73-8, Tributyl phosphate, properties 127-09-3 127-18-4, Tetrachloroethene, properties **129-64-6** 131-11-3, Dimethyl phthalate 132-65-0, Dibenzothiophene 134-81-6, Benzil 135-70-6, p-Quaterphenyl 137-40-6, Sodium propanoate 139-42-4 139-45-7, Tripropionin 139-85-5, 3,4-Dihydroxybenzaldehyde 140-31-8, N-(2-

Aminoethyl)piperazine 141-10-6 141-22-0, Ricinoleic acid 141-32-2 141-53-7, Sodium formate 141-78-6, Ethyl acetate, properties 142-72-3, Magnesium acetate 142-82-5, Heptane, properties 142-84-7, Dipropylamine 142-92-7, Hexyl ethanoate 142-96-1, Dibutyl ether 143-10-2, 1-Decanethiol 147-82-0, 2,4,6-Tribromoaniline 151-67-7 191-48-0, Decacyclene 229-87-8, Phenanthridine 230-27-3, 7,8-Benzoquinoline 238-84-6, 1,2-Benzofluorene 243-17-4, 2,3-Benzofluorene 246-42-4 260-94-6, Acridine 271-44-3, Indazole 271-89-6, 2,3-Benzofuran 278-06-8, Quadricyclane 279-19-6, Nortricyclene 279-23-2, Norbornane 283-56-7, Triethanolamine borate 286-20-4, Cyclohexene oxide 288-13-1, Pyrazole 288-32-4, Imidazole, properties 288-88-0, 1H-1,2,4-Triazole 292-64-8, Cyclooctane 295-37-4, Cyclam 296-18-4, Cyclooctadecane 303-43-5, Cholesteryl oleate 323-09-1, 2-Fluoronaphthalene 327-57-1, L-Norleucine 327-62-8, Potassium propionate 329-71-5, 2,5-Dinitrophenol 334-48-5, Decanoic acid 335-57-9, Perfluoroheptane 352-32-9, 4-Fluorotoluene 354-06-3, 1-Bromo-2-chloro-1,1,2-trifluoroethane 354-34-7, Trifluoroacetyl fluoride 354-58-5, 1,1,1-Trichlorotrifluoroethane 355-25-9 355-42-0, Perfluorohexane 356-24-1, Methyl perfluorobutanoate 359-40-0, Oxalyl fluoride 359-70-6, Perfluorotriethylamine 367-11-3, 1,2-Difluorobenzene 372-18-9, 1,3-Difluorobenzene 375-42-8, 1,4-Dibromo-2,3-dichlorohexafluorobutane 392-56-3, Hexafluorobenzene 398-23-2, 4,4'-Difluorobiphenyl 420-04-2, Cyanamide 434-90-2, Decafluorobiphenyl 454-92-2, 3-Trifluoromethylbenzoic acid 462-06-6, Fluorobenzene 477-75-8, Triptycene 487-89-8, 3-Indolealdehyde 493-01-6, cis-Decalin 493-02-7, trans-Decalin 493-05-0, Isochroman 493-08-3, Chroman 493-77-6, Triphenyl-s-triazine 498-66-8, Bicyclo[2.2.1]heptene 501-52-0, Benzenepropanoic acid 501-65-5, Diphenylacetylene 502-44-3, 2-Oxepanone 502-56-7, 5-Nonanone 502-97-6, 1,4-Dioxane-2,5-dione 505-23-7, 1,3-Dithiane 505-29-3, 1,4-Dithiane 505-32-8, Isophytol 513-29-1, Triglycine sulfate 513-29-1D, solid solution with triglycine selenate 513-35-9, 2-Methyl-2-butene 520-03-6, N-Phenylphthalimide 526-75-0 528-29-0, 1,2-Dinitrobenzene 536-74-3, Phenylacetylene 540-18-1, Pentyl butanoate 540-36-3, 1,4-Difluorobenzene 540-84-1, 2,2,4-Trimethylpentane 541-73-1, 1,3-Dichlorobenzene 542-11-0, Aniline hydrobromide 542-28-9, δ-Valerolactone 542-59-6, Ethylene glycol acetate 542-92-7, Cyclopentadiene, properties 544-76-3, Hexadecane 544-85-4, Dotriacontane 544-97-8, Dimethylzinc 546-44-1 546-56-5, Octaphenylcyclotetrasiloxane 554-12-1, Methyl propanoate 554-84-7, 3-Nitrophenol 555-43-1, Tristearin 556-67-2 557-17-5, Methyl n-propyl ether 557-20-0, Diethylzinc 557-34-6, Zinc acetate 558-13-4, Tetrabromomethane 562-49-2, 3,3-Dimethylpentane 563-45-1, 3-Methyl-1-butene 563-46-2, 2-Methyl-1-butene 563-68-8, Thallium acetate 563-80-4, Isopropyl methyl ketone 563-83-7, 2-Methylpropanamide 565-59-3, 2,3-Dimethylpentane 565-60-6, 3-Methyl-2-pentanol 573-56-8, 2,6-Dinitrophenol 576-24-9, 2,3-Dichlorophenol 576-26-1, 2,6-Dimethylphenol 577-71-9, 3,4-Dinitrophenol 580-35-8 581-40-8, 2,3-Dimethylnaphthalene 583-53-9, 1,2-Dibromobenzene 583-55-1, 2-Bromoiodobenzene 583-58-4, 3,4-Dimethylpyridine 583-61-9, 2,3-Lutidine 583-78-8, 2,5-Dichlorophenol 585-76-2, 3-Bromobenzoic acid 586-11-8, 3,5-Dinitrophenol 586-76-5, 4-Bromobenzoic acid 589-38-8, 3-Hexanone 589-39-9, Potassium butyrate 589-87-7, 4-Bromoiodobenzene 589-93-5, 2,5-Dimethylpyridine 590-18-1, cis-2-Butene 591-18-4 591-22-0, 3,5-Dimethylpyridine 591-35-5, 3,5-Dichlorophenol 591-47-9, 4-Methylcyclohexene 591-68-4 591-78-6, 2-Hexanone 592-31-4,

Butylurea 592-41-6, 1-Hexene, properties 592-84-7, Butyl methanoate 593-45-3, Octadecane 593-49-7, Heptacosane (thermodn. properties of)

IT 7346-41-0, 2-Chloroadamantane 7434-35-7, Perdeuterated triglycine sulfate 7782-40-3, Diamond, properties 7782-42-5, Graphite, properties 9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9002-89-5, Polyvinyl alcohol 9003-17-2 9003-27-4, Polyisobutylene 9003-53-6, Polystyrene 9004-70-0, Cellulose nitrate 9011-14-7, Poly(methyl methacrylate) 9043-05-4 10051-96-4, Trisarcosine calcium chloride 10323-20-3, D-Arabinose 10368-91-9 10500-57-9, 5,6,7,8-Tetrahydroquinoline 11077-12-6, **Azaferrocene** 11077-24-0, Ferrocenium hexafluorophosphate 11078-19-6, Bis(benzene)chromium chloride 11105-79-6 12070-79-0 12078-15-8 12078-16-9 12079-65-1, Cymantrene 12082-08-5, Benzene chromium tricarbonyl 12082-87-0, Ferrocene-d10 12087-59-1, Bis(toluene)chromium iodide 12089-29-1, Bis(benzene)chromium iodide 12099-17-1, Bis(biphenyl)chromium iodide 12121-86-7 12148-59-3, Bis(mesitylene)chromium iodide 12156-67-1 12176-31-7 12257-73-7, Bis(ethylbenzene)chromium iodide 13146-23-1, Copper phenylacetylenide 13373-97-2, 1-Eicosanethiol 13475-82-6, 2,2,4,6,6-Pentamethylheptane 13509-52-9, 1,3,6-Trimethyluracil 13963-57-0, Aluminum acetylacetonate 14024-18-1, Iron(III) acetylacetonate 14024-63-6, Zinc acetylacetonate 14167-59-0, Tetratriacontane 14240-75-6, Tetraethylammonium tetrachloroferrate 14618-78-1, 1,1-Dimethoxy-3-cyanopropane 14637-34-4 14690-98-3, Copper (II) formate tetradeuterate 14722-82-8, 2-Chloroisonitrosoacetanilide 14879-21-1 14879-23-3 14901-07-6 14965-49-2, Methylammonium iodide 15649-95-3, Tetramethylammonium tetrachloroferrate 15721-10-5, p-Methacryloyloxybenzoic acid 15844-05-0, Homocubane-4-carboxylic acid 16093-77-9 16093-78-0 16577-51-8, Lithium hexanoate 16594-83-5 16647-05-5 16649-52-8 16674-78-5, Magnesium diacetate tetrahydrate 16674-79-6, Strontium dicalcium propionate 16761-13-0, Lithium heptanoate 16825-16-4, Phytone 16986-24-6, m-Carborane 17082-12-1, trans-Azobenzene 17115-98-9, Barium dicalcium propionate 17122-74-6, 4-Ethoxyisonitrosoacetanilide 17203-66-6, Lead dicalcium propionate 17356-96-6 17501-44-9, Zirconium acetylacetonate 18001-46-2 18030-61-0, p-Trichlorosilylbiphenyl 18254-57-4, 1,1-Dicyclohexyldodecane 18343-40-3, Hexaphenylmelamine 18616-15-4 18993-50-5 18993-51-6 18993-52-7 18993-53-8 19032-64-5 19049-40-2, Beryllium oxyacetate 19261-73-5 19269-28-4, 3-Methylhexanal 19288-59-6, Phenylaminoethyl methacrylate 19353-21-0, 3,4-Dimethylpentanal 19361-62-7, Styrene-d8 19455-20-0, Potassium 2-methylpropanoate 19479-83-5 20030-30-2 20267-19-0, 2-Hydroxyethyl pivalate 20267-21-4 20321-02-2, Hydrazinium hydrogen oxalate 21279-19-6, Tetraethylammonium tetrabromoferrate 21303-03-7, Lithium butyrate 21482-12-2, Pentapropylene glycol 21679-31-2, Chromium acetylacetonate 22428-30-4 22808-06-6, 2,2,5,5-Tetramethylhex-3-ene 23014-56-4, 1,1,10,10-Tetramethylcyclooctadecane 23014-57-5 23307-02-0 23358-17-0 23672-37-9 23672-38-0 24028-46-4 24800-44-0, Tripropylene glycol 24888-58-2 24936-97-8 24968-12-5, Poly(butylene terephthalate) 24979-97-3, Polytetrahydrofuran 24991-43-3, Butadiene-propylene copolymer 25014-31-7, Poly(α-methylstyrene 25036-32-2, Polyvinyltrimethylsilane 25038-54-4, Poly[imino(1-oxo-1,6-hexanediyl)], properties 25067-06-5, 1-Polyhexene 25067-58-7, Polyacetylene 25067-64-5, Poly-1,3-dioxolane 25068-01-3, Ethylene-butadiene copolymer 25085-53-4 25087-26-7, Polymethacrylic acid 25214-70-4

25248-42-4, Poly[oxy(1-oxo-1,6-hexanediyl)] 25265-71-8, Dipropylene glycol 25322-68-3 25456-55-7 25657-08-3, Tetrapropylene glycol 25686-28-6 25734-27-4, Poly[imino(1-oxo-1,2-ethanediyl)] 25853-28-5 25926-96-9 25926-99-2 25959-51-7 26202-08-4, Polyglycolide 26227-73-6 26692-50-2 26715-68-4 26744-16-1, Polyvinyldimethylphenylsilane 26745-88-0, Poly(hexamethylene sebacate) 26760-54-3 26762-10-7, Poly(hexamethylene sebacate) 27426-98-8 27613-96-3 27732-42-9, Polystyrene-d8 27974-49-8, β-Selenodiglycol 28182-81-2 28183-09-7 28323-47-9, Poly(diethylsiloxane) 28500-27-8 28576-60-5 28702-26-3 28702-43-4, Poly(1-pentene-1,5-diyl) 28702-45-6, Poly(1-octene-1,8-diyl) 28726-71-8 29171-20-8 29412-62-2 29415-95-0, Manxane 29743-08-6 29743-10-0 29743-11-1 30209-80-4 31295-54-2 31401-34-0 31693-72-8 32761-36-7, **Azacymantrene** 33440-88-9 33589-44-5 33734-55-3 33734-56-4 34028-37-0 34244-89-8 34244-90-1 34244-91-2 34244-92-3, Thallium nonanoate 34375-89-8, 3-Methylpyrrolidine 34504-12-6 34507-12-5, Wurster's Blue perchlorate 34993-58-3 35165-78-7, Bis(m-xylene)chromium iodide 35280-78-5 35602-69-8, Cholesteryl stearate 35705-97-6 35812-56-7 36376-18-8 36653-82-4, 1-Hexadecanol 37196-91-1 37541-72-3, Ammonium hydrogen oxalate hemihydrate 37869-35-5, **Hexamethyltrisilazane** 38332-83-1 38423-62-0, 2-Ethoxyisonitrosoacetanilide 38454-35-2 38869-19-1 38974-20-8 39015-36-6 39060-95-2, 2,2'-Biindanyl 39470-17-2, Biferrocenium triiodide 40317-63-3 40937-40-4, Methylammonium hexachlorotellurate 41902-42-5, Tri-tert-Butylmethanol 42182-84-3 42182-87-6 42525-64-4 42572-91-8 47189-08-2 52709-84-9 52709-85-0 52794-80-6, Hexapropylene glycol 52910-78-8 53188-90-2 53261-61-3 55011-91-1, Thiourea nitrate 55671-71-1 56379-16-9 56544-26-4 56685-61-1 56993-57-8 57863-11-3 57863-12-4 57947-14-5 58675-48-2 58675-49-3 58675-50-6 59358-70-2 59358-71-3 59358-73-5 59454-35-2 59683-18-0 59789-07-0 59890-70-9 60046-87-9 60130-27-0, Poly[(diphenylgermylene)-1,2-ethenediyl] 60435-70-3, 2-Methyl-1-heptanol 60970-45-8 61361-56-6 62155-50-4 62629-77-0 63287-55-8 63335-41-1
(thermodn. properties of)

L52 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:427385 HCAPLUS Full-text
DOCUMENT NUMBER: 117:27385
TITLE: Spirodilactam bisimides and their curing
INVENTOR(S): Wang, Pen Chung
PATENT ASSIGNEE(S): Shell Oil Co., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5093500	A	19920303	US 1990-599188	19901017
PRIORITY APPLN. INFO.:			US 1990-599188	19901017

OTHER SOURCE(S): MARPAT 117:27385
AB The title compds., e.g., N-bisimidohydrocarbyl group-bearing 1,6-**diaza**[4.4]spirodilactams or their oligomers, are prepared by the condensation reaction of the spirodilactones with diamines (I) and unsatd. dicarboxylic

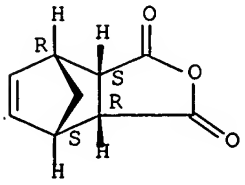
acids (II) or with the imides of I and II; and are curable, e.g. by heat. Thus, stirring 0.073 mol N-[4-(4-aminobenzyl)phenyl]-5-norbornene-2,3-dicarboximide with 0.0365 mol 1,6-dioxaspiro[4.4]nonane-2,7-dione in N-methylpyrrolidone at 170-180° for 12 h gave a title product which had m.p. >250°; and cured (250°/3 min) products from which had glass transition temperature >300°.

IT **129-64-6**, cis-5-Norbornene-endo-2,3-dicarboxylic anhydride
(reaction of, with spirodilactone and diamines)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C07D209-56
ICS C07D403-04

INCL 548410000

CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 38

ST thermally curable norbornene bisimide **diazaspirodilactam**; spirodilactam bisamidonorbornene polymn prepn; spirodilactone diamine dicarboxylic acid reaction

IT Heat-resistant materials
(bis(unsatd. imide) **diazaspirodilactam** polymers as, preparation of)

IT **129-64-6**, cis-5-Norbornene-endo-2,3-dicarboxylic anhydride
(reaction of, with spirodilactone and diamines)

L52 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:9470 HCAPLUS Full-text

DOCUMENT NUMBER: 102:9470

TITLE: Macrocyclic polyamine and polycyclic polyamine multifunctional lubricating oil additives

INVENTOR(S): Brois, Stanley James; Gutierrez, Antonio

PATENT ASSIGNEE(S): Exxon Research and Engineering Co. , USA

SOURCE: Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 113582	A2	19840718	EP 1983-307871	19831222
EP 113582	A3	19860423		
EP 113582	B1	19911016		
R: BE, DE, FR, GB, IT, NL				
US 4302395	A	19811124	US 1980-167481	19800711

US 4637886	A	19870120	US 1983-550977		19831116
CA 1218988	A1	19870310	CA 1983-443313		19831214
EP 325307	A2	19890726	EP 1989-105398		19831222
EP 325307	A3	19891123			
EP 325307	B1	19930203			
R: BE, DE, FR, GB, IT, NL					
EP 329195	A2	19890823	EP 1989-105399		19831222
EP 329195	A3	19891129			
EP 329195	B1	19910508			
R: BE, DE, FR, GB, IT, NL					
AU 8322890	A	19840705	AU 1983-22890		19831223
AU 574657	B2	19880714			
BR 8307144	A	19840807	BR 1983-7144		19831226
JP 59130885	A	19840727	JP 1983-244994		19831227
JP 06051701	B	19940706			
AU 8815293	A	19880721	AU 1988-15293		19880428
AU 607758	B2	19910314			
AU 8815294	A	19880728	AU 1988-15294		19880428
AU 593439	B2	19900208			
AU 8947330	A	19900607	AU 1989-47330		19891229
AU 623962	B2	19920528			
JP 06166689	A	19940614	JP 1993-173655		19930622
JP 06239866	A	19940830	JP 1993-173656		19930622
JP 06239867	A	19940830	JP 1993-173657		19930622
PRIORITY APPLN. INFO.:			US 1982-453143	A	19821227
			US 1983-550977	A	19831116
			US 1977-806326	A3	19770613
			US 1977-817217	A2	19770720
			US 1978-967289	A3	19781207
			US 1979-67546	A1	19790817
			US 1981-243781	A3	19810316
			US 1982-415980	A2	19820908
			EP 1983-307871	P	19831222

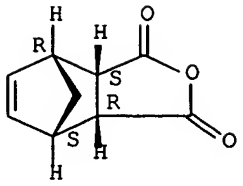
AB To prepare a dispersant-viscosity index improver for lubricating oils, 200 g of ethylene-propylene copolymer and mineral oil grafted with maleic anhydride in 100 mL xylene was added dropwise to 10 g 1,3-propanediamine in 100 mL xylene at room temperature, which was followed by distillation of the xylene and reaction water. The mixture was then heated to 200° and purged with N for 2 h to give a product with viscosity 2366 cSt at 100°.

IT **129-64-6**
(aminolysis of, with diamines, in manufacture of multifunctional lubricating oil additives)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC C10M001-32; C10L001-22; C08F008-32
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 28
IT **129-64-6** 4200-92-4 28777-98-2 67066-88-0
(aminolysis of, with diamines, in manufacture of multifunctional lubricating oil additives)
IT 56-18-8D, reaction products with ethylene-maleic anhydride-propylene copolymers 108-30-5D, polyisobutenyl derivs., aminolysis products with **polyazapolyamines** 109-76-2D, reaction products with ethylene-maleic anhydride-propylene copolymers 295-37-4D, reaction products with polyisobutenylsuccinic anhydride 296-35-5D, reaction products with polyisobutenylsuccinic anhydride 7034-04-0D, reaction products with polyisobutenylsuccinic anhydride 10563-26-5D, reaction products with ethylene-maleic anhydride-propylene copolymers 31069-12-2D, reaction products with polyamines 59543-92-9D, reaction products with nadic anhydride 63833-76-1D, reaction products with ethylene-maleic anhydride-propylene copolymers 93623-33-7D, reaction products with polyisobutenylsuccinic anhydride 93623-34-8D, reaction products with polyisobutenylsuccinic anhydride 93623-35-9 93623-36-0 93623-37-1 93623-38-2 93623-39-3 93623-40-6 93623-41-7D, polyisobutenyl derivs 93623-42-8D, polyisobutenyl derivs
(lubricating oil multifunctional additives)

L52 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:52590 HCAPLUS Full-text
DOCUMENT NUMBER: 100:52590
TITLE: Heat-resistant epoxy resin compositions
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58145725	A	19830830	JP 1982-28209	19820225
PRIORITY APPLN. INFO.:			JP 1982-28209	19820225

AB The title compns. afford cured products having excellent heat resistance and elec. and chemical properties and comprise polyphenolic crosslinking agent having weight-average mol. weight ≥2000, acid anhydride crosslinking agent having mol. weight ≤500, epoxy resin having ≥3 epoxy groups per mol., and catalyst. The epoxy resin is preferably mixed after melt blending the crosslinking agents and catalyst. The compns. are useful for injection and press molding, and as powder coatings and adhesives because of the various means of controlling viscosity, pot life, and curing time. The compns. are

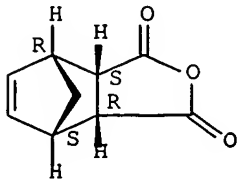
used in elec. and electronic materials. Thus, a composition was prepared by melt blending at 80° 15 parts phenol novolak epoxy resin and 10 parts of a mixture of crosslinking agents and catalyst prepared by melt-blending at 80° poly(vinylphenol) [59269-51-1] 5, methylendomethylenetetrahydrophthalic anhydride [53584-57-9] 5, and DBU phenol salt [36443-64-8] 0.1 part.

IT **129-64-6**
(crosslinking agents, for epoxy phenolic resin compns.)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC C08G059-62

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42

ST epoxy phenolic resin heat resistance; anhydride crosslinker epoxy phenolic resin; polyvinylphenol crosslinker epoxy resin; **diazabicycloundecene** phenol salt crosslinker; potting compn epoxy phenolic

IT **129-64-6** 25550-51-0
(crosslinking agents, for epoxy phenolic resin compns.)

L52 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:465537 HCAPLUS Full-text

DOCUMENT NUMBER: 99:65537

TITLE: The acute oral toxicity, repellency, and **hazard** potential of 998 chemicals to one or more species of wild and domestic birds

AUTHOR(S): Schafer, E. W., Jr.; Bowles, W. A., Jr.; Hurlbut, J.

CORPORATE SOURCE: Wildl. Res. Cent., U. S. Fish Wildl. Serv., Denver, CO, 80225, USA

SOURCE: Archives of Environmental Contamination and Toxicology (1983), 12(3), 355-82
CODEN: AECTCV; ISSN: 0090-4341

DOCUMENT TYPE: Journal

LANGUAGE: English

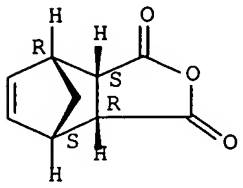
AB The acute oral toxicity, repellency, and **hazard** potential of 998 chemical to 1 or more of 68 species of wild and domestic birds was determined by standardized testing procedures. Red-winged blackbirds (Agelaius phoeniceus) were the most sensitive of the bird species tested on a large number of chems., and an index based on red-wing toxicity and repellency may provide an appropriate indication of the probability of acute avian poisoning episodes. Avian repellency and toxicity were not pos. correlated (i.e., toxicity varied independently with repellency).

IT **129-64-6**
(toxicity of, to birds, repellency in relation to)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 4-4 (Toxicology)
Section cross-reference(s): 1, 5

IT 97-77-8 98-01-1, biological studies 98-03-3 98-07-7 98-11-3, biological studies 98-29-3 98-82-8 98-98-6 99-05-8 99-09-2 99-11-6 99-30-9 99-43-4 99-55-8 99-59-2 99-65-0 99-76-3 99-92-3 100-01-6, biological studies 100-22-1 100-35-6 100-43-6 100-47-0, biological studies 100-51-6, biological studies 100-55-0 101-01-9 101-05-3 101-08-6 101-21-3 101-77-9 101-99-5 102-06-7 102-56-7 102-82-9 102-96-5 103-33-3 103-84-4 104-15-4, biological studies 104-29-0 104-45-0 104-46-1 104-55-2 104-85-8 104-94-9 104-96-1 105-40-8 106-22-9 106-44-5, biological studies 106-45-6 106-47-8, biological studies 106-48-9 106-49-0, biological studies 106-50-3, biological studies 106-51-4, biological studies 107-02-8, biological studies 107-09-5 107-92-6, biological studies 108-10-1 108-30-5, biological studies 108-33-8 108-34-9 108-39-4, biological studies 108-42-9 108-44-1, biological studies 108-45-2, biological studies 108-68-9 108-89-4 108-95-2, biological studies 108-98-5, biological studies 108-99-6 109-00-2 109-06-8 109-09-1 109-73-9, biological studies 109-74-0 109-97-7 109-99-9, biological studies 110-00-9 110-02-1 110-16-7, biological studies 110-18-9 110-65-6 110-86-1, biological studies 110-93-0 110-95-2 111-13-7 111-26-2 111-51-3 111-53-5 111-85-3 111-86-4 111-87-5, biological studies 112-12-9 112-18-5 112-20-9 112-24-3 112-31-2 112-37-8 112-52-7 112-53-8 112-56-1 112-66-3 113-18-8 113-59-7 113-92-8 114-26-1 115-29-7 115-31-1 115-38-8 115-44-6 115-78-6 115-79-7 115-90-2 116-06-3 116-53-0 116-85-8 117-10-2 117-12-4 117-14-6 117-39-5 117-78-2 117-79-3 117-80-6 117-89-5 118-75-2, biological studies 118-78-5 118-92-3 119-32-4 119-38-0 119-53-9 120-12-7, biological studies 120-35-4 120-58-1 120-72-9, biological studies 120-79-6 120-80-9, biological studies 120-88-7 120-93-4 121-34-6 121-44-8, biological studies 121-50-6 121-60-8 121-66-4 121-75-5 122-10-1 122-14-5 122-39-4, biological studies 122-88-3 123-30-8 123-56-8 123-63-7 123-75-1, biological studies 124-07-2, biological studies 124-09-4, biological studies 124-13-0 124-22-1 124-38-9, biological studies 124-68-5 125-46-2 126-15-8 126-22-7 126-27-2 126-38-5 126-52-3 127-33-3 128-94-9 128-95-0 129-15-7 129-44-2 **129-64-6** 130-15-4 130-89-2 131-09-9 131-11-3 131-14-6 132-64-9 133-06-2 133-18-6 133-32-4 133-53-9 134-20-3 134-62-3 135-19-3, biological studies 135-20-6 135-77-3 137-05-3 137-26-8 137-30-4

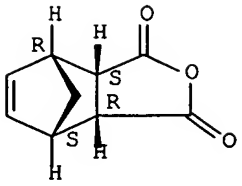
138-59-0 140-10-3, biological studies 140-20-5 140-31-8
140-56-7 140-57-8 140-65-8 140-67-0 141-32-2 141-66-2
141-90-2 142-08-5 143-07-7, biological studies 143-27-1
143-50-0 143-82-8 144-02-5 146-54-3 148-01-6 148-24-3,
biological studies 149-15-5 149-16-6 149-91-7, biological
studies 150-13-0 150-76-5 150-78-7 151-05-3 152-16-9
153-18-4 155-41-9 260-94-6 288-13-1 288-32-4, biological
studies 288-88-0 290-38-0 290-87-9 291-21-4 297-78-9
297-97-2 297-99-4 298-00-0 298-02-2 298-04-4 299-42-3
299-84-3 299-85-4 299-86-5 300-62-9 302-17-0 303-01-5
304-91-6 309-00-2
(toxicity of, to birds, repellency in relation to)

L52 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:125300 HCAPLUS Full-text
DOCUMENT NUMBER: 98:125300
TITLE: Nitrosamine photolysis as a synthetic method: the addition of aminium radicals to unsaturated carbon-carbon bonds
AUTHOR(S): Chow, Yuan L.; Colon, Carlos J.; Chang, David W. L.; Pillay, K. Somasekharen; Lockhart, Robert L.; Tezuka, Takahiro
CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, BC, V5A 1S6, Can.
SOURCE: Acta Chemica Scandinavica, Series B: Organic Chemistry and Biochemistry (1982), B36(9), 623-34
CODEN: ACBOCV; ISSN: 0302-4369
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 98:125300

AB Acid complexed nitrosamines (I) decompose from their lowest singlet excited state to give aminium radicals and NO transients. Aminium radicals initiate addition to unsatd. groups to give 1-amino-2-nitroso compds. under an inert atmospheric, or 1-amino-2-nitrates under O2. The photoaddn. of I to olefins, acetylenes and fused aromatic hydrocarbons, and the subsequent transformations of the intermediates are described. An aminium radical initiated intramol. cyclization to give tetracyclic aza compds. is also described. Photoaddn. of nitrosamines to 4-propenylanisole or 3-butenol was efficient; that to 3-butenyl benzoates under oxidative conditions was only fair due to the presence of a benzene ring. The oxidative photoaddn. to 3-butenyl halides was followed by spontaneous cyclization to an azaspiro compound The photoaddn. to Ph-substituted acetylenes gave β-nitroso enamines which hydrolyzed to dioxo monoximes under neutral conditions but decomposed extensively under acidic conditions. Fused aromatic hydrocarbons acted as singlet sensitizers as well as substrates to induce similar addition giving amino nitroso adducts which took different courses of conversion dependent on reaction conditions, and on steric and electronic factors.

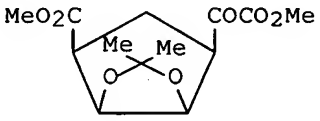
IT **129-64-6**
(photolysis of nitrosopiperidine in presence of)
RN 129-64-6 HCAPLUS
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

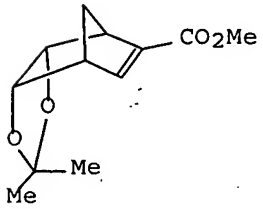


CC 22-13 (Physical Organic Chemistry)
Section cross-reference(s): 25
IT 83-32-9 5162-44-7 84904-05-2 84904-06-3 84904-07-4 120-12-7, uses and miscellaneous 129-00-0, uses and miscellaneous **129-64-6** 501-65-5 536-74-3 627-27-0 778-29-0 781-92-0 927-73-1 1576-84-7
(photolysis of nitrosopiperidine in presence of)

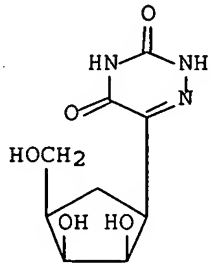
L52 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:551086 HCAPLUS Full-text
DOCUMENT NUMBER: 95:151086
TITLE: An approach to the synthesis of cyclopentane analogs of the lyxosyl C-nucleosides
AUTHOR(S): Bin Sadikun, Amirin; Davies, David I.; Kenyon, Robert F.
CORPORATE SOURCE: Dep. Chem., King's Coll., London, WC2R 2LS, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1981), (8), 2299-305
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II

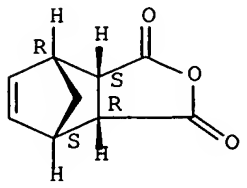


III

AB The cyclopentylglyoxalate I, a potential synthon for cyclopentane analogs of the lyxosyl C-nucleosides, was prepared in 9 steps from the Diels-Alder adduct of cyclopentadiene and maleic anhydride, through oxidative ring cleavage the norbornene II. Sequential substitution reaction with H2NCSNHNH2, cyclization, reduction, formylation, hydrolysis, and oxidation of I gave the **azauracil** III.
IT **129-64-6**

(hydrolysis of)
RN 129-64-6 HCAPLUS
CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 33-7 (Carbohydrates)
Section cross-reference(s): 24
ST cyclopentane analog lyxosyl nucleoside; cyclopentylglyoxalate synthon
cyclopentane analog nucleoside; **cyclopentylazauracil**; **azauracil** cyclopentyl
IT **129-64-6**
(hydrolysis of)

L52 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:59720 HCAPLUS Full-text
DOCUMENT NUMBER: 64:59720
ORIGINAL REFERENCE NO.: 64:11145f-h,11146c-f
TITLE: 1,3-Dipolar cycloadditions which yield endo adducts. Reaction of benzenesulfonyl azide with cis-endo and cis-exo-norbornene-5,6-dicarboxylic acid anhydrides
AUTHOR(S): Oehlschlager, A. C.; Zalkow, L. H.
CORPORATE SOURCE: Oklahoma State Univ., Stillwater
SOURCE: Chemical Communications (London) (1966), (1), 5-6
CODEN: CCOMA8; ISSN: 0009-241X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Reinvestigation of the reaction of norbornene derivs. with benzenesulfonyl azide shows that I yields 60% endo-aziridine II and 19% exo-aziridine V while III gives 74% endo-aziridine IV and 22% exo-aziridine VI. PhSO2N3 was found not to evolve N on heating under the reaction conditions in CCl4 alone or in the presence of I or the dihydro analog of III. Thus, the mechanisms involving intermediate nitrenes or induced decomposition of the azide by the anhydride are discounted. Hydrolysis of IV followed by oxidative bisdecarboxylation with Pb(OAc)4 in C5H5N gave VII which on catalytic hydrogenation gave endo-aziridine VIII. Treatment of VIII with PhSK, followed by catalytic hydrogenolysis gave the known sulfonamide IX. endo-[2,3-d1.4] Analog of IV was oxidatively decarboxylated to yield the [2,3-d1.4] analog of VII, thus eliminating the possibility of rearrangement during decarboxylation. The structures of V and VI were apparent from their N.M.R. spectra. A support for the mechanism involving an intermediate triazoline was obtained by observing that the entropy of activation for this reaction (ΔS.dbldag. -29 cal./degree) compares favorably with that reported for the reaction of norbornene with phenyl azides (ΔS.dbldag. -30 cal./degree). Addnl. support for the formation of the aziridines by way of 1,3-dipolar cyclo-addition was found

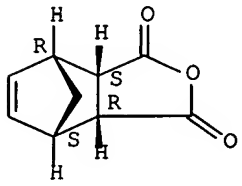
in the comparative insensitivity of the rate of the reaction to solvent polarity. The exo-addition rule must be used with caution.

IT **129-64-6**, 5-Norbornene-2,3-dicarboxylic anhydride, cis-endo-
(reaction with benzenesulfonyl azide)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 37 (Heterocyclic Compounds (One Hetero Atom))

IT 3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)-, cis-endo-, cis-exo-, trans-endo
3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)-, cis-endo-, cis-exo-, trans-endo

IT 878193-24-9P, 3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)-, trans-exo 878193-24-9P, 3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)-, trans-exo
(preparation of)

IT **129-64-6**, 5-Norbornene-2,3-dicarboxylic anhydride, cis-endo-
2746-19-2, 5-Norbornene-2,3-dicarboxylic anhydride, cis-exo-
(reaction with benzenesulfonyl azide)

L52 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1964:9407 HCAPLUS Full-text

DOCUMENT NUMBER: 60:9407

ORIGINAL REFERENCE NO.: 60:1616c-e

TITLE: The reaction of benzenesulfonyl azide with 2,3-endo-cis-dicarboxybicyclo[2.2.1]-5-heptene anhydride

AUTHOR(S): Zalkow, L. H.; Kennedy, C. D.

CORPORATE SOURCE: Oklahoma State Univ., Stillwater

SOURCE: Journal of Organic Chemistry (1963), 28(12), 3309-12
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

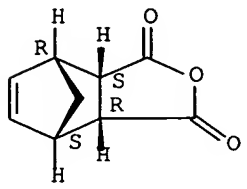
AB Benzenesulfonyl azide has been found to react with 2,3-endo-cis-dicarboxybicyclo[2.2.1]-5heptene anhydride in refluxing CCl4 to give the aziridine 8-aza-N- benzenesulfonamidotricyclo[2.2.1.12,3-endo]octane-5,6-endo-dicarboxy anhydride (I). The structure and sterochem. of I were established by its conversion to the lactone-lactam under mild conditions. The corresponding 2,3-exo-anhydride reacts in a similar manner to give the exo aziridine. 2,3-endo-cis-Dicarboxy-5,6-endo-cis- diaminobicyclo[2.2.1]heptane dilactam was converted into the nortricyclene derivative (II).

IT **129-64-6**, 5-Norbornene-2,3-dicarboxylic anhydride, endo-cis-
(reaction with benzenesulfonyl azide)

RN 129-64-6 HCAPLUS

CN 4,7-Methanoisobenzofuran-1,3-dione, 3a,4,7,7a-tetrahydro-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 34 (Alicyclic Compounds)

IT 3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)-, dimethyl ester
3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)-, dimethyl ester

IT 6410-70-4P, 3-**Azatricyclo**[3.2.1.02,4]octane-6,7-dicarboxylic anhydride, 3-(phenylsulfonyl)- 6410-70-4P, 2,6-Methano-1H-isobenzofuro[5,6-b]azirine-3,5-dione, hexahydro-1-(phenylsulfonyl)- 6410-70-4P, 2,6-Methano-1H-isobenzofuro[5,6-b]azirine-3,5-dione, hexahydro-1-(phenylsulfonyl)- 7295-06-9P, 2,3-Norbornanedicarboxylic acid, 5-benzenesulfonamido-6-hydroxy- 92851-91-7P, 2,3-Norbornanedicarboxylic acid, 5-benzenesulfonamido-6-hydroxy-, γ-lactone 97417-36-2P, 3,5-Methanocyclopenta[b]pyrrole-7-carboxylic acid, octahydro-6-hydroxy-2-oxo-1-(phenylsulfonyl)-, γ-lactone 98089-69-1P, 3,5-Methanocyclopenta[b]pyrrole-7-carboxylic acid, 6-chlorooctahydro-2-oxo-1-(phenylsulfonyl)- 98365-51-6P, 3,5-Methanocyclopenta[b]pyrrole-7-carboxylic acid, octahydro-6-hydroxy-2-oxo-1-(phenylsulfonyl)-, acetate
(preparation of)

IT **129-64-6**, 5-Norbornene-2,3-dicarboxylic anhydride, endo-cis-
(reaction with benzenesulfonyl azide)

```
=> d que l50
L11           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  129-64-6/RN
L25         761 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11
L26          55 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11/DP
L38         761 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 OR L26
L46         127 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MAREK, P?/AU
L47          41 SEA FILE=HCAPLUS ABB=ON  PLU=ON  TROCHA, A?/AU
L48           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L47
L49           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L46 OR L47) AND L38
L50           4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L48 OR L49


=> d l50 1-4 ibib ab

L50  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2004:248345  HCAPLUS  Full-text
DOCUMENT NUMBER:          140:399698
TITLE:                    Combination of Paclitaxel and Nitric Oxide as a
                          Novel Treatment for the Reduction of Restenosis
AUTHOR(S):                Lin, Chia-En; Garvey, David S.; Janero, David R.;
                          Letts, L. Gordon; Marek, Przemyslaw;
                          Richardson, Stewart K.; Serebryanik, Diana;
                          Shumway, Matthew J.; Tam, S. William; Trocha,
                          A. Mark; Young, Delano V.
CORPORATE SOURCE:         NitroMed Inc., Bedford, MA, 01730, USA
SOURCE:                   Journal of Medicinal Chemistry (2004), 47(9),
                          2276-2282
                          CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER:                American Chemical Society
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB    The combination of a nitric oxide (NO) donor and a paclitaxel-NO donor
      conjugate coated on a vascular stent was tested in a rabbit iliac artery model
      of stenosis as a potential therapy for restenosis. Paclitaxel was conjugated
      with a NO donor at the 7-position to give compound 7.  An adamantane-based NO
      donor 14 was synthesized and combined with 7 to provide a burst of NO in the
      first few critical hours following injury to the vessel wall.  Both 7 and 14
      demonstrated antiproliferative activity (IC50 = 20 nM and 15 μM, resp.) and
      antiplatelet activity (IC50 = 10 and 1 μM, resp.).  Stents were coated with a
      layer of a polymer containing test compds.  The total amount of NO eluted from
      the stents after a 6 h implantation in the rabbit iliac artery was 35%, 95%,
      and 69% of the original content for the stents coated with 7, 14, and the
      combination of 7 and 14, resp.  The antistenotic activity of 7 and 14 was
      determined in a 28-day rabbit model with two control groups (uncoated stents
      and polymer-coated stents) and two study groups (paclitaxel-coated stents and
      stents coated with the combination of 7 and 14).  Polymer-coated stents caused
      inflammation and increased stenosis by 39% when compared to the uncoated
      stents.  The stents coated with 7 plus 14 were as good as the uncoated stents,
      41% better than the polymer-coated stents and 34% better than the paclitaxel-
      coated stents.  These data indicate a beneficial effect of adding NO to an
      antiproliferative agent (paclitaxel) and suggest a potential therapeutic
      combination for the treatment of stenotic vessel disease.
REFERENCE COUNT:          23    THERE ARE 23 CITED REFERENCES AVAILABLE FOR
                                THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                                RE FORMAT

L50  ANSWER 2 OF 4  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2002:618165  HCAPLUS  Full-text
```

TITLE: Synthesis and COX-2 inhibitory activity of a series of novel pyrazoles
AUTHOR(S): Bandarage, R. R.; Augustyniak, M. E.; Bandarage, U. K.; Cochran, E. D.; Earl, R. A.; Garvey, D. S.; Janero, D. R.; Letts, L. G.; **Marek, P.**; Martino, A. M.; Murty, M. G.; Richardson, S. K.; Schroeder, J. D.; Shumway, M. J.; Tam, S. W.; **Trocha, A. M.**; Young, D. V.
CORPORATE SOURCE: NitroMed Inc, Bedford, MA, 01730, USA
SOURCE: Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), MEDI-314. American Chemical Society: Washington, D. C.
CODEN: 69CZPZ
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB The treatment of fever, inflammation and pain has a long and distinguished history. Asprin was introduced 100 yr ago as the first of the NSAIDs, and subsequently many other drugs have been developed for the same purpose. Their mechanism involves inhibition of the cyclooxygenase (COX) enzyme, which catalyzes a key cyclisation in the biosynthesis of prostaglandins. Of the two isoforms, COX-1 is involved in gastroprotection and thromboxane synthesis, while COX-2 is induced in response to proinflammatory agents. NSAIDs are non-selective inhibitors and are therefore associated with gastric ulceration. Selective COX-2 inhibitors appear to overcome this problem, however they appear to have a higher incidence of adverse cardiovascular (CV) side effects. The antiplatelet/antithrombotic activity of nitric oxide (NO) suggests a solution to this problem and here we disclose some novel, highly selective COX-2 inhibitors, which contain a NO donor group to provide CV protection.

L50 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:868945 HCAPLUS Full-text
DOCUMENT NUMBER: 136:575
TITLE: Infrared thermography and methods of use
INVENTOR(S): **Marek, Przemyslaw A.; Trocha, Andzrej M.**
PATENT ASSIGNEE(S): Nitromed, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 31 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2001046471	A1	20011129	US 2001-850081		20010508
US 6762202	B2	20040713			
US 2004162243	A1	20040819	US 2004-781705		20040220
PRIORITY APPLN. INFO.:			US 2000-202935P	P	20000509
			US 2001-850081	A1	20010508

OTHER SOURCE(S): MARPAT 136:575

AB The present invention describes rapid noninvasive methods for measuring vasodilation or changes in blood flow in a patient following administration of at least one compound that donates, transfers or releases nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, stimulates endogenous synthesis of nitric oxide or is a substrate for nitric oxide

synthase and/or at least one vasoactive agent. The method comprises the administration of at least one compound that donates, transfers or releases nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, stimulates endogenous synthesis of nitric oxide or is a substrate for nitric oxide synthase and/or at least one vasoactive agent to the patient followed by monitoring the temperature change of an area of interest using IR thermog. The present invention provides methods for diagnosing diseases or disorders related to vasodilation and changes in blood flow, such as, sexual dysfunction, Raynaud's syndrome, inflammation, hypertension, gastrointestinal disorders and central nervous system disorders. The sexual dysfunction is preferably female sexual dysfunction and female sexual arousal. The vasoactive agents include potassium channel activators, calcium channel blockers, α-adrenergic receptor antagonists, β-blockers, phosphodiesterase inhibitors, adenosine, ergot alkaloids, vasoactive intestinal peptides, prostaglandins, dopamine agonists, opioid antagonists, endothelin antagonists and thromboxane inhibitors. The present invention can also be used to screen and identify drug candidates for treating diseases, disorders and conditions resulting from vasodilation or changes in blood flow. The present invention also describes compns. comprising at least one S-nitrosothiol compound for diagnosing, monitoring and/or treating female sexual dysfunctions.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:516567 HCAPLUS Full-text
DOCUMENT NUMBER: 107:116567
TITLE: Determination of the stability of epoxy systems for encapsulation of microelectronic packages
AUTHOR(S): Bartova, J.; Bily, K.; **Marek, P.**
CORPORATE SOURCE: TESLA VUST, Prague, Czech.
SOURCE: Crosslinked Epoxies, Proc. Discuss. Conf., 9th (1987), Meeting Date 1986, 557-62. Editor(s): Sedlacek, Blahoslav; Kahovec, Jaroslav. de Gruyter: Berlin, Fed. Rep. Ger.
CODEN: 56BCAG
DOCUMENT TYPE: Conference
LANGUAGE: English

AB The determination of hydrolytic stability and thermal properties offered some objective characteristics of epoxy resin systems which were the base for potting compns. for electronics use. The amount of ion impurities in water exts. depended on the curing method, i.e., anhydride-cured products were the most stable. The probability of corrosion attack on encapsulated discrete devices or integrated circuits was markedly lower with anhydride-cured epoxy resins, as compared to amine- or ion-cured epoxy resins. By the DSC method, it was possible to determine the starting temperature of degradation reaction, which is a better quality criterion of the system used than glass temperature The amount of heat released in the degradation reaction is by far not as decisive for the quality of the system as the temperature dependence of the kinetic constant, as shown by the more stable systems at lower temps. This is in good relation to the sp. heat values of anhydride- and polyamine-cured epoxy resins, because of their stable character in the temperature range 50-200°.

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=> d his nofile

     (FILE 'HOME' ENTERED AT 13:47:48 ON 11 JAN 2007)

     FILE 'HCAPLUS' ENTERED AT 13:47:58 ON 11 JAN 2007
L1             1 SEA ABB=ON  PLU=ON  US20040162243/PN
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 13:48:18 ON 11 JAN 2007
L2            35 SEA ABB=ON  PLU=ON  (156-86-5/BI OR 53054-07-2/BI OR
                 74-79-3/BI OR 10102-43-9/BI OR 116243-73-3/BI OR 122130-63-
                 6/BI OR 125978-95-2/BI OR 129-64-6/BI OR 139427-42-2/BI OR
                 162758-33-0/BI OR 346684-19-3/BI OR 364057-10-3/BI OR
                 372-75-8/BI OR 37221-79-7/BI OR 375371-22-5/BI OR 375371-23
                 -6/BI OR 375371-24-7/BI OR 375371-28-1/BI OR 375371-30-5/BI
                  OR 51209-75-7/BI OR 52-67-5/BI OR 542-56-3/BI OR 56-85-9/B
                 I OR 56-87-1/BI OR 56577-02-7/BI OR 57564-91-7/BI OR
                 58-61-7/BI OR 61040-78-6/BI OR 70-18-8/BI OR 70-26-8/BI OR
                 7684-18-6/BI OR 79032-48-7/BI OR 9000-96-8/BI OR 9025-82-5/
                 BI OR 90880-94-7/BI)
L3             3 SEA ABB=ON  PLU=ON  L2 AND METHOXYPH?
L4             4 SEA ABB=ON  PLU=ON  L2 AND 3/NR
L5             3 SEA ABB=ON  PLU=ON  L4 NOT ADENOSIN?
L6             1 SEA ABB=ON  PLU=ON  364057-10-3/RN
L7             0 SEA ABB=ON  PLU=ON  364057-10-3/CRN
L8             1 SEA ABB=ON  PLU=ON  346684-19-3/RN
L9             0 SEA ABB=ON  PLU=ON  346684-19-3/CRN
L10            1 SEA ABB=ON  PLU=ON  375371-28-1/RN
L11            1 SEA ABB=ON  PLU=ON  129-64-6/RN
L12            1 SEA ABB=ON  PLU=ON  375371-22-5/RN
L13            1 SEA ABB=ON  PLU=ON  375371-23-6/RN
L14            0 SEA ABB=ON  PLU=ON  375371-23-6/CRN
L15            0 SEA ABB=ON  PLU=ON  375371-22-5/CRN
L16          313 SEA ABB=ON  PLU=ON  129-64-6/CRN
L17            0 SEA ABB=ON  PLU=ON  L16 NOT PMS/CI

     FILE 'HCAPLUS' ENTERED AT 13:53:03 ON 11 JAN 2007
L18            2 SEA ABB=ON  PLU=ON  L6
L19            3 SEA ABB=ON  PLU=ON  L8
L20            1 SEA ABB=ON  PLU=ON  L10
L21            3 SEA ABB=ON  PLU=ON  (L18 OR L19 OR L20)
                 D 3 IBIB
                 D 3 HITSTR
L22            0 SEA ABB=ON  PLU=ON  L6/DP OR L6/D
L23            0 SEA ABB=ON  PLU=ON  L8/D OR L8/DP
L24            0 SEA ABB=ON  PLU=ON  L10/D OR L10/DP
L25          761 SEA ABB=ON  PLU=ON  L11
L26           55 SEA ABB=ON  PLU=ON  L11/DP
L27            0 SEA ABB=ON  PLU=ON  L26 AND ?AZA?
L28          126 SEA ABB=ON  PLU=ON  L11/D
L29            0 SEA ABB=ON  PLU=ON  L28 AND L1
L30            0 SEA ABB=ON  PLU=ON  L27 AND L1
L31            1 SEA ABB=ON  PLU=ON  L1 AND L25
L32            1 SEA ABB=ON  PLU=ON  L12
L33            1 SEA ABB=ON  PLU=ON  L13
L34            0 SEA ABB=ON  PLU=ON  L13/D
L35            0 SEA ABB=ON  PLU=ON  L13/DP
L36            0 SEA ABB=ON  PLU=ON  L12/D
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L37           0 SEA ABB=ON  PLU=ON  L12/DP
L38         761 SEA ABB=ON  PLU=ON  L25 OR L26

     FILE 'REGISTRY' ENTERED AT 14:09:06 ON 11 JAN 2007
L39           1 SEA ABB=ON  PLU=ON  L2 AND PROPANETHIOL?
L40           1 SEA ABB=ON  PLU=ON  L2 AND PROPAN?


     FILE 'HCAPLUS' ENTERED AT 14:10:42 ON 11 JAN 2007
L41          40 SEA ABB=ON  PLU=ON  L40
L42           1 SEA ABB=ON  PLU=ON  L38 AND L41
L43          21 SEA ABB=ON  PLU=ON  L38 AND ?AZA?
L44           3 SEA ABB=ON  PLU=ON  L21 OR L42
L45          21 SEA ABB=ON  PLU=ON  L43 NOT L44
L46         127 SEA ABB=ON  PLU=ON  MAREK, P?/AU
L47          41 SEA ABB=ON  PLU=ON  TROCHA, A?/AU
L48           3 SEA ABB=ON  PLU=ON  L46 AND L47
L49           2 SEA ABB=ON  PLU=ON  (L46 OR L47) AND L38
L50           4 SEA ABB=ON  PLU=ON  L48 OR L49
L51           2 SEA ABB=ON  PLU=ON  L44 NOT L50
L52          21 SEA ABB=ON  PLU=ON  L45 NOT L50

     FILE 'REGISTRY' ENTERED AT 14:46:49 ON 11 JAN 2007
L53           2 SEA ABB=ON  PLU=ON  L2 AND NITROSOTHIO?
L54           3 SEA ABB=ON  PLU=ON  L2 AND OXAZOL?

     FILE 'HCAPLUS' ENTERED AT 14:48:29 ON 11 JAN 2007
L55           2 SEA ABB=ON  PLU=ON  L54
L56         579 SEA ABB=ON  PLU=ON  L53
L57           1 SEA ABB=ON  PLU=ON  L56 AND L38
L58           1 SEA ABB=ON  PLU=ON  L55 AND L56
L59           1 SEA ABB=ON  PLU=ON  L57 OR L58
L60           3 SEA ABB=ON  PLU=ON  L59 OR L51
L61           2 SEA ABB=ON  PLU=ON  L60 NOT
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